

EXHIBIT 1

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Google Inc.

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

The Authors Guild, Inc. et al.,

Plaintiffs,

v.

Google Inc.,

Defendant.

Civil Action No. 05 CV 8136 (DC)

**DEFENDANT GOOGLE INC.'S RESPONSES AND OBJECTIONS TO
PLAINTIFFS' FIRST SET OF REQUESTS FOR ADMISSION**

Pursuant to Rules 26 and 36 of the Federal Rules of Civil Procedure, Defendant Google Inc. (“Google”) hereby responds to Plaintiffs’ First Set of Requests for Admission (Nos. 1-34) with the following objections and responses.

GENERAL OBJECTIONS

1. Google objects to the preface, instructions, and definitions to the Requests to the extent that they purport to impose obligations that exceed those imposed by the Federal Rules of Civil Procedure, relevant local rules, and applicable case law. In responding to these requests, Google has followed the applicable law and has ignored the improper preface, instructions, and definitions.

2. Google objects to the Requests in their entirety and to each request to the extent that the documents and information sought are protected from discovery by the attorney-client privilege, the work-product doctrine, or any other applicable privilege.

3. Google objects to each and every request to the extent that it seeks information that is confidential and/or proprietary information. To the extent not otherwise subject to objection, Google will produce such confidential documents in accordance with the terms of the protective order entered in this case.

4. Google objects to the Requests in their entirety and to each discovery request as unduly burdensome to the extent they seek information or documents already known to Plaintiffs, or which are equally available to Plaintiffs.

5. Google objects to the Requests in their entirety and to each discovery request to the extent they seek documents not relevant to any claim or defense in this action or reasonably calculated to lead to the discovery of admissible evidence.

6. Google objects to The Authors Guild's definition of "Google" as vague, ambiguous, unintelligible, and overly-broad. For purposes of responding to these discovery requests, Google will interpret "Google" to mean Google Inc. and/or its agents.

7. Google objects to the time period of these requests as overly broad and unduly burdensome.

8. Google objects to the Requests to the extent they request information pertaining to persons or activities outside the United States.

9. Google objects to the Requests to the extent they request information pertaining to Google products other than Google Books, and Google's responses are limited to Google Books.

10. Google objects to each and every discovery request to the extent that it purports to impose a burden of providing information not in Google's possession, custody, or control or which cannot be found in the course of a reasonable search. Google has undertaken a reasonable and good-faith effort to locate all relevant, non-privileged documents known to it at this time that are responsive to these requests, but they reserve the right to conduct further investigation and discovery as to any issue raised or suggested by any discovery request and to rely on any subsequently discovered information or documents at trial or any other proceeding.

11. Google has not yet completed its investigation of the facts relating to this case. Any and all responses to the following discovery requests are therefore based solely on information presently known to Google, and Google reserves its right to conduct further discovery and investigation and to use at trial or any other proceeding evidence of any subsequently discovered facts, documents, or information.

12. In responding to these discovery requests, Google does not concede the relevancy or materiality of any request or of the subject to which any request refers. Google's responses to

these discovery requests are made expressly subject to and without waiving any objections in any proceeding, including trial of this action, as to competency, relevancy, materiality, or privilege of any of the documents referred to or the responses given.

RESPONSES AND OBJECTIONS TO REQUESTS FOR ADMISSION

REQUEST FOR ADMISSION NO. 1:

As part of its Library Project, Google began in 2004 to digitally copy printed in-copyright works in their entirety, without permission from the copyright owners of such works.

RESPONSE TO REQUEST FOR ADMISSION NO. 1:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to the definition of "Library Project" as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Google admits that it began in 2004 to scan, among other works, printed in-copyright and out-of-copyright works from libraries in their entirety, and that Google scans some works without the permission of the copyright owners in those works, as Google's acts with respect to those works constitute fair use. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 2:

One of Google's goals in its Library Project has been to digitally copy all of the printed books in the United States, including in-copyright books, regardless of their content.

RESPONSE TO REQUEST FOR ADMISSION NO. 2:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of

the term “copy” as vague and ambiguous, and construes that term to mean “to create one or more copies, as that term is defined in 17 U.S.C. § 101.” Google objects to the definition of “Library Project” as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 3:

Google undertook the Library Project for commercial reasons.

RESPONSE TO REQUEST FOR ADMISSION NO. 3:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to the definition of “Library Project” as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 4:

Google undertook the Library Project to gain a competitive advantage over other participants in the search engine market.

RESPONSE TO REQUEST FOR ADMISSION NO. 4:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to the definition of “Library Project” as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 5:

Google has entered into agreements with libraries, including the University of Michigan, Stanford University, and the University of California, to obtain access to works for the purpose of digitally copying such works, including in-copyright works.

RESPONSE TO REQUEST FOR ADMISSION NO. 5:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to the definition of "Library Project" as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Google admits that it has entered into agreements with certain libraries, including the University of Michigan, Stanford University, and the University of California, pursuant to which those libraries request that Google scan books, including in-copyright works, provided to Google by the library. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 6:

In order to gain access to printed works for the purpose of digitally copying them, Google agreed to provide libraries with digital copies of works copied from the libraries' collections.

RESPONSE TO REQUEST FOR ADMISSION NO. 6:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to the definition of "Library Project" as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Google admits that it has entered into agreements with certain libraries, including the University of Michigan, Stanford University, and the University of California, pursuant to which those libraries request that Google scan books, including in-copyright works, provided to Google by

the library, and Google provides digital copies of those books to the libraries which, pursuant to the contracts, may be used only in ways which do not violate copyright law. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 7:

To date, as part of its Library Project, Google has copied millions of in-copyright works, without permission from the copyright owners of such works.

RESPONSE TO REQUEST FOR ADMISSION NO. 7:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to the definition of "Library Project" as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Google admits that it has scanned millions of in-copyright works from library collections and that, because Google's acts constituted fair use, permission was generally not sought or granted with respect to some of those works. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 8:

To date, as part of its Library Project, Google has provided to libraries digital copies of millions of in-copyright works, without permission from the copyright owners of such works.

RESPONSE TO REQUEST FOR ADMISSION NO. 8:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of

the term “copy” as vague and ambiguous, and construes that term as that term is defined in 17 U.S.C. § 101. Google objects to the definition of “Library Project” as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Google admits that it has entered into agreements with certain libraries, pursuant to which those libraries have requested that Google scan books, including in-copyright works, provided to Google by the library, and Google has provided digital copies of millions of those books to the libraries which, pursuant to the contracts, may be used only in ways which do not violate copyright law. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 9:

To date, as part of its Library Project, Google has copied in their entirety millions of in-copyright works, including in-print and out-of-print works, fiction and non-fiction works, reference works, anthologies, educational works, textbooks, dissertations, monographs, journals, government publications and other type of works.

RESPONSE TO REQUEST FOR ADMISSION NO. 9:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request’s use of the term “copy” as vague and ambiguous, and construes that term to mean “to create one or more copies, as that term is defined in 17 U.S.C. § 101.” Google objects to the definition of “Library Project” as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Google admits that it has scanned in their entirety millions of books from libraries, including in-print and out-of-print works, fiction and non-fiction works, reference works, anthologies, educational works, textbooks, dissertations, monographs, journals, government publications and other types of works. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 10:

Each in-copyright work copied by Google as part of its Library Project was copied by Google in its entirety at least twice, without permission from the copyright owners of such works.

RESPONSE TO REQUEST FOR ADMISSION NO. 10:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to the definition of "Library Project" as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Google admits that it creates and maintains, as necessary for its fair uses, more than one copy of the books it scans from library collections. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 11:

Google maintains on its servers digital copies of millions of in-copyright works, without permission from the copyright owners of such works.

RESPONSE TO REQUEST FOR ADMISSION NO. 11:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term as that term is defined in 17 U.S.C. § 101. Google objects to the definition of "Library Project" as vague and ambiguous. Google objects to the term "works" as vague and ambiguous. Google objects to this Request to

the extent it requests information pertaining to Google products other than Google Books, and Google's response is limited to Google Books.

Subject to and without waiving its objections, Google responds as follows: Google admits that it creates and maintains, as necessary for its fair uses, more than one copy of the books it scans from library collections, and that it has scanned millions of books from library collections. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 12:

Google uses the works copied in its Library Project to display search results to users of its search engine.

RESPONSE TO REQUEST FOR ADMISSION NO. 12:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to the definition of "Library Project" as vague and ambiguous. Google objects to this Request to the extent it requests information pertaining to Google products other than Google Books, and Google's response is limited to Google Books.

Subject to and without waiving its objections, Google responds as follows: Google admits that one of the fair uses to which it puts books is rendering them searchable using the Google Books website. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 13:

In response to search queries by users of its search engine, Google has displayed content on the Internet from millions of in-copyright works, without permission from the copyright owner of such works.

RESPONSE TO REQUEST FOR ADMISSION NO. 13:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to the definition of "Library Project" as vague and ambiguous. Google objects to this Request to the extent it requests information pertaining to Google products other than Google Books, and Google's response is limited to Google Books.

Subject to and without waiving its objections, Google responds as follows: Google admits in response to search queries by users of Google Books, in order to help users find the book they're looking for, Google has displayed short "snippets" of text from millions of books to those users, though it only displays a maximum of three "snippets" in response to a search query. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 14:

In response to search inquiries by users of its search engine, Google searches the complete text of works copied in its Library Project.

RESPONSE TO REQUEST FOR ADMISSION NO. 14:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to the definition of "Library Project" as vague and ambiguous. Google objects to this Request to the extent it requests information pertaining to Google products other than Google Books, and Google's response is limited to Google Books.

Subject to and without waiving its objections, Google responds as follows: Google admits in response to search queries by users of its Google Books website, in order to help users find the book they're looking for, Google searches the complete text of at least some of the works scanned from library collections. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 15:

None of the representative plaintiffs gave permission to Google to copy, distribute or display any of their works.

RESPONSE TO REQUEST FOR ADMISSION NO. 15:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to this Request to the extent it requests information pertaining to Google products other than Google Books, and Google's response is limited to Google Books.

Subject to and without waiving its objections, Google responds as follows: Google admits that the representative plaintiffs themselves did not give Google any permissions with respect to any of their books, as Google's acts constituted fair use, although their publishers gave Google certain permissions with respect to some of their works. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 16:

Google did not seek permission from any of the representative plaintiffs to copy, distribute or display any of their works.

RESPONSE TO REQUEST FOR ADMISSION NO. 16:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to this Request to the extent it requests information pertaining to Google products other than Google Books, and Google's response is limited to Google Books.

Subject to and without waiving its objections, Google responds as follows: Google admits that, because its acts constituted fair use, Google did not seek any permission from the representative plaintiffs themselves, although their publishers gave Google certain permissions with respect to some of their works. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 17:

Google did not seek permission from copyright owners before copying in-copyright works in its Library Project.

RESPONSE TO REQUEST FOR ADMISSION NO. 17:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to the definition of "Library Project" as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Google admits that before beginning to scan works from libraries, because its acts constituted fair use, it generally did not seek or receive permissions from copyright holders with respect to its project of

scanning books from libraries. Except as specifically admitted, Google responds as follows:

Denied.

REQUEST FOR ADMISSION NO. 18:

Google has not compensated copyright owners for its copying in its Library Project of in-copyright works.

RESPONSE TO REQUEST FOR ADMISSION NO. 18:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to the definition of "Library Project" as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Google admits that it has not provided direct monetary compensation to copyright holders with respect to its scanning of books from libraries and the display of short "snippets" of text in response to search queries. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 19:

Google has not compensated copyright owners for its display on the Internet of content from in-copyright works copied in its Library Project.

RESPONSE TO REQUEST FOR ADMISSION NO. 19:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to the definition of "Library Project" as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Google admits that it has not provided direct monetary compensation to copyright holders with respect to its scanning of books from libraries and the display of short “snippets” of text in response to search queries. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 20:

Google’s security measures may be breached due to the actions of outside parties, employee error, malfeasance, or otherwise, and, as a result, an unauthorized party may obtain access to data held by Google, including works copied in its Library Project.

RESPONSE TO REQUEST FOR ADMISSION NO. 20:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the ground that it presents a hypothetical question. Google objects to this Request on the ground that it is vague and ambiguous, including without limitation in its use of the term “security.” Google objects to this Request to the extent it requests information pertaining to Google products other than Google Books, and Google’s response is limited to Google Books.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 21:

Outside parties may attempt to fraudulently induce Google employees, users, or customers to disclose sensitive information in order to gain access to data held by Google.

RESPONSE TO REQUEST FOR ADMISSION NO. 21:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the ground that it presents a hypothetical question. Google objects to this Request on the ground that it is vague and ambiguous. Google objects to this Request on the ground that it seeks

information pertaining to the state of mind of third parties, of which Google has no direct knowledge. Google objects to this Request to the extent it requests information pertaining to Google products other than Google Books, and Google's response is limited to Google Books.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 22:

Because the techniques used by outside parties to obtain unauthorized access to data change frequently and often are not recognized until launched against a target, Google may be unable to anticipate these techniques or to implement adequate preventative measures.

RESPONSE TO REQUEST FOR ADMISSION NO. 22:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the ground that it presents a hypothetical question. Google objects to this Request on the ground that it is vague and ambiguous. Google objects to this Request to the extent it requests information pertaining to Google products other than Google Books, and Google's response is limited to Google Books.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 23:

Google does not consider itself responsible for the security of the digital copies of works provided by it to libraries in its Library Project.

RESPONSE TO REQUEST FOR ADMISSION NO. 23:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the ground that it is vague and ambiguous, including without limitation in its use of the term "security."

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 24:

Google does not monitor or control the security of the digital copies of works provided by it to libraries in its Library Project.

RESPONSE TO REQUEST FOR ADMISSION NO. 24:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the ground that it is vague and ambiguous, including without limitation in its use of the terms “monitor,” “control,” and “security.” Google objects to this Request’s use of the term “copies” as vague and ambiguous, and construes that term as it is defined in 17 U.S.C. § 101.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 25:

The security measures of libraries who receive digital copies of works from Google may be breached due to the actions of outside parties, employee error, malfeasance, or otherwise, and, as a result, an unauthorized party may obtain access to data held by such libraries.

RESPONSE TO REQUEST FOR ADMISSION NO. 25:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the ground that it presents a hypothetical question. Google objects to this Request on the ground that it is vague and ambiguous, including without limitation in its use of the term “security.” Google objects to this Request’s use of the term “copies” as vague and ambiguous, and construes that term as it is defined in 17 U.S.C. § 101.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 26:

Outside parties may attempt to fraudulently induce library employees or patrons to disclose sensitive information in order to gain access to data held by the library.

RESPONSE TO REQUEST FOR ADMISSION NO. 26:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the ground that it presents a hypothetical question. Google objects to this Request on the ground that it is vague and ambiguous. Google objects to this Request on the ground that it seeks information pertaining to the state of mind of third parties, of which Google has no direct knowledge.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 27:

Because the techniques used by outside parties to obtain unauthorized access to data change frequently and often are not recognized until launched against a target, libraries may be unable to anticipate these techniques or to implement adequate preventative measures.

RESPONSE TO REQUEST FOR ADMISSION NO. 27:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the ground that it presents a hypothetical question. Google objects to this Request on the ground that it is vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 28:

Google pays license fees and royalties to certain content providers to display content on its website.

RESPONSE TO REQUEST FOR ADMISSION NO. 28:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the ground that it is vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Google admits that it pays license fees to certain content providers to display certain content on certain websites that Google operates. Except as specifically admitted, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 29:

Google does not use the works copied in its Library Project for the purpose of criticism.

RESPONSE TO REQUEST FOR ADMISSION NO. 29:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the ground that it calls for a legal conclusion. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to the definition of "Library Project" as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 30:

Google does not use the works copied in its Library Project for the purpose of commenting on the works.

RESPONSE TO REQUEST FOR ADMISSION NO. 30:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the

ground that it calls for a legal conclusion. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to the definition of "Library Project" as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 31:

Google does not use the works copied in its Library Project for the purpose of news reporting.

RESPONSE TO REQUEST FOR ADMISSION NO. 31:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the ground that it calls for a legal conclusion. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies, as that term is defined in 17 U.S.C. § 101." Google objects to the definition of "Library Project" as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 32:

Google does not use the works copied in its Library Project for the purpose of teaching.

RESPONSE TO REQUEST FOR ADMISSION NO. 32:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the ground that it calls for a legal conclusion. Google objects to this Request's use of the term "copy" as vague and ambiguous, and construes that term to mean "to create one or more copies,

as that term is defined in 17 U.S.C. § 101.” Google objects to the definition of “Library Project” as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 33:

Google does not use the works copied in its Library Project for the purpose of scholarship.

RESPONSE TO REQUEST FOR ADMISSION NO. 33:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the ground that it calls for a legal conclusion. Google objects to this Request’s use of the term “copy” as vague and ambiguous, and construes that term to mean “to create one or more copies, as that term is defined in 17 U.S.C. § 101.” Google objects to the definition of “Library Project” as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Denied.

REQUEST FOR ADMISSION NO. 34:

Google does not use the works copied in its Library Project for the purpose of research.

RESPONSE TO REQUEST FOR ADMISSION NO. 34:

Google objects to this request to the extent it calls for the disclosure of material protected by the attorney-client privilege or any other privilege. Google objects to this Request on the ground that it calls for a legal conclusion. Google objects to this Request’s use of the term “copy” as vague and ambiguous, and construes that term to mean “to create one or more copies, as that term is defined in 17 U.S.C. § 101.” Google objects to the definition of “Library Project” as vague and ambiguous.

Subject to and without waiving its objections, Google responds as follows: Denied.

Dated: December 22, 2011

By: /s/ Joseph C. Gratz

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PROOF OF SERVICE

I am a citizen of the United States and resident of the State of California. I am employed in San Francisco County, State of California, in the office of a member of the State Bar of California, at whose direction the service was made. I am over the age of eighteen years, and not a party to the within action. My business address is 217 Leidesdorff Street, San Francisco, CA 94111.

On December 22, 2011, I served the following document(s) in the manner described below:

DEFENDANT GOOGLE INC.'S RESPONSES TO PLAINTIFFS' FIRST SET OF REQUESTS FOR ADMISSION

- ☐ (BY U.S. MAIL) I am personally and readily familiar with the business practice of Durie Tangri LLP for collection and processing of correspondence for mailing with the United States Postal Service, and I caused such envelope(s) with postage thereon fully prepaid to be placed in the United States Postal Service at San Francisco, California.
- ☐ (BY MESSENGER SERVICE) by consigning the document(s) to an authorized courier and/or process server for hand delivery on this date.
- ☐ (BY FACSIMILE) I am personally and readily familiar with the business practice of Durie Tangri LLP for collection and processing of document(s) to be transmitted by facsimile and I caused such document(s) on this date to be transmitted by facsimile to the offices of addressee(s) at the numbers listed below.
- ☐ (BY OVERNIGHT MAIL) I am personally and readily familiar with the business practice of Durie Tangri LLP for collection and processing of correspondence for overnight delivery, and I caused such document(s) described herein to be deposited for delivery to a facility regularly maintained by Federal Express for overnight delivery.
- ☒ BY ELECTRONIC SERVICE: By electronically mailing a true and correct copy through Durie Tangri's electronic mail system from jgratz@durietangri.com to the email addresses set forth below.
- ☐ (BY PERSONAL DELIVERY) I caused such envelope to be delivered by hand to the offices of each addressee below.

On the following part(ies) in this action:

Michael J. Boni
Joanne E. Zack
BONI & ZACK LLC
15 St. Asaphs Road
Bala Cynwyd, PA 19004
Telephone: 610-822-0200
Fax: 610-822-0206
Email: mboni@bonizack.com
jzack@bonizack.com

Attorneys for Plaintiffs

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on December 22, 2011, in San Francisco, California.

/s/ Joseph C. Gratz

Joseph C. Gratz

EXHIBIT 2

Expert Report of Ben Edelman

Introduction and qualifications

1. I am an assistant professor at Harvard Business School. My research focuses on the design of electronic marketplaces including Internet advertising, search engines, privacy, and information security. I hold a Ph.D. in Economics from Harvard University, a J.D. from Harvard Law School, an A.M. in statistics from Harvard University, and an A.B. in economics from Harvard College. Further information concerning my background and qualifications is provided in my curriculum vitae, which is attached hereto as Exhibit A.
2. My experience includes more than 15 years as a computer programmer, in which time I developed software for my own use, end-user computers, local networks, and web servers; and administered servers for myself and others. My technical experience includes efforts to verify the security of other programmers' code including uncovering shortfalls in others' security systems. I have studied and written about questions of information security, accidental information revelation, and information distributed more broadly than online services anticipated. For example, I have personally uncovered multiple Google privacy flaws, including improper data collection by Google Toolbar as well as improper data distribution by Google JotSpot. I also found and demonstrated to a court's satisfaction that an early online video service, iCraveTV, had failed to secure video contents in the way that it had previously represented to that court.
3. My academic publications explore a variety of aspects of online business, including multiple articles considering the difficulty of limiting access to and use of information systems. A full list of my publications is provided in my curriculum vitae, which is attached hereto as Exhibit A. Among the publications relevant to questions at issue in this matter are the following articles: In "Shortcomings and Challenges in the Restriction of Internet Retransmissions of Over-the-air Television Content to Canadian Internet Users," a submission to Industry Canada, I evaluated the difficulty of imposing certain access restrictions when distributing video material over the Internet. In "Securing Online Advertising: Rustlers and Sheriffs in the New Wild West," I presented the challenges of designing online advertising markets to satisfy the requirements of advertisers, online publishers, and advertising platforms while unauthorized activities such as advertising fraud are taking place. In numerous articles, I have presented all manner of online miscreants using information systems in ways their providers did not intend, did not anticipate, sought to prevent, and/or claimed to seek to prevent.
4. My teaching assignment currently consists of a HBS elective course called *The Online Economy*, which analyzes strategies for all manner of online businesses. The course includes concerns arising out information security.
5. I have testified as an expert witness in federal courts, and I have testified to committees of the United States House of Representative and United States Senate. I have offered expert testimony in the U.S. District Courts for Michigan and Pennsylvania and in Utah State Court. A listing of the cases in which I have testified as an expert at trial or by deposition during the past four years is attached as Exhibit B.
6. I am being compensated for my work in this matter at the rate of \$450 per hour.

Scope of retention

7. I understand Google is asserting a fair use defense to the allegations that, without permission from rights-holders, it digitized millions of in-copyright books from a number of university libraries, maintains digital copies of those books on its servers, distributed digital copies of those books to the libraries, and displays on the Internet verbatim content from the books. In this report, I address and opine on risks of a security breach exposing widely online the contents of in-copyright books from (a) the scanning, storage and display of books (or book excerpts) by smaller, less sophisticated entities that, under an adverse fair use ruling, would be permitted to engage in conduct similar to Google's Library Project, (b) Google's distribution of digital copies of scanned books to libraries, and (c) Google's retention and storage of multiple copies of the millions of books it digitizes in its Library Project.

8. I conclude that unrestricted and widespread conduct of the sort engaged in by Google would result in a substantially adverse impact on the potential market for books.

9. If the Google Library Project is found not to be a fair use, then the books could be digitally copied, distributed and displayed through licenses that include security protocols and a damages structure for breaches of those protocols. Conversely, if such uses are deemed permissible without requiring permission from rights-holders -- i.e., if fair use were to be found here -- then rights-holders will have little or no means to reduce the security risks identified in this report.

10. Exhibit C lists the documents I reviewed and sources I considered.

Piracy of books is already a real, not hypothetical problem

11. The electronic distribution of electronic copies of books, without authorization from publishers or rights-holders, is already occurring. For example, consider a user seeking a copy of "American Sniper," the number one bestseller hardcover nonfiction book according to the New York Times bestseller list dated April 1, 2012. Such a user might run a Google search for "american sniper mobi" (without quotes), using the word "mobi" to indicate interest in a ".mobi" book (a popular electronic book file format). The first, second, third, fourth, fifth, sixth, eighth, ninth, and tenth-listed links all offer or purport to offer copies of the specified book. I checked these nine links; I found that all but one confirmed that the book was available and offered a download link or download instructions. Of the ten links, only one (the seventh) pointed to a site (Amazon) that charged for access to the book. Of course the book is a top-selling in-copyright commercial publication; anyone offering no-charge copies is almost certainly doing so without permission from the copyright holder.

12. Sites with pirated books fall into several categories. Some sites charge for pirated book copies, though they do not share the resulting revenues with those who created the books. Other sites distribute pirated book copies for free. Among sites offering free book copies, some offer direct web-based downloads, providing pirated book copies when a user simply clicks to request a copy. Other sites offer links to Bit torrent ".torrent" files that direct a user's computer to other computers from which a desired file may be copied.

Similar Scanning Operations Could Allow Book Copies to Be Copied and Redistributed

13. If Google's conduct is found to be a fair use and others engage in similar conduct, a risk is created of book redistribution through piracy.

14. If other providers ("providers") scan books, the resulting digital book copies could enter widespread public circulation via any of several channels. First, pirates could extract book copies through defects in the security of a provider's systems. Once books are scanned, the resulting digital files are stored on a server or, more often, multiple servers. Defects in the access controls of any such server could allow pirates to gain access to digital book copies. Defects could arise through flaws in the operating system, database server, web server, or other software run on a provider's servers; such flaws have been widespread in even the most popular server software. Defects could also arise through the provider's custom software, which is likely to be less secure because custom software usually receives a lesser level of scrutiny, testing, and verification than software that is distributed and used more broadly.

15. Second, pirates could extract books via errors in the security configuration of a provider's systems. If even one of a provider's servers lacks a required update or other security feature, pirates could use that server to obtain the book copies.

16. Third, pirates could extract books by impersonating provider staff to access provider systems. Suppose an attacker can obtain the username and password of a person with full access to a provider's book copies. The attacker can log in with that password to access and copy the provider's book copies. Similar attacks are frequent: For example Amazon Zappos,¹ Gawker,² and Microsoft Hotmail³ suffered similar attacks in 2009-2011. Even the United Nations suffered a breach of the same type.⁴ If a single staff person at a single book provider used the same password for a hacked site and for access to book copies, then a hacker could use that password to access book copies, copy book copies to the hacker's own systems, and redistribute book copies further from there.

17. Fourth, a rogue employee could intentionally redistribute book copies. Rogue employees gain and exploit privileged access to data despite organizations' efforts to screen and supervise key staff. Consider the classified US State Department material distributed by Wikileaks in 2010 – information obtained via a rogue employee. A rogue employee with access to book copies could intentionally make those copies available to the public.

18. Fifth, when books are scanned by a smaller and less sophisticated provider, there is a particularly acute risk of book contents being accessed and redistributed. For one, less sophisticated organizations have a reduced capability to design, install, and maintain suitable web site, database, and related security systems as well as anti-reconstruction

¹ Dominic Rushe. "Zappos Database Hit by Cyberattack." The Guardian. January 16, 2012.

² Zachary Seward and Albert Sun. "The Top 50 Gawker Media Passwords." Wall Street Journal - Digits. December 13, 2010.

³ Bogdan Calin. "Statistics from 10,000 Leaked Hotmail Passwords." Acunetix. October 6, 2009. <http://www.acunetix.com/blog/news/statistics-from-10000-leaked-hotmail-passwords/>.

⁴ Chloe Albanesius. "Team Poison Hacks UN, Leaks Usernames, Passwords." PC Magazine. November 30, 2011.

systems to secure books. Furthermore, less sophisticated organizations have a lesser ability to screen key staff to prevent data loss through rogue employees, and a lesser ability to configure security systems to exclude hackers. Thus, if other companies and organizations follow Google's lead in scanning books, a risk exists that book contents will be accessed and redistributed.

19. As set out in the section captioned "A Single Breach Could Cause Devastating Harm to the Class," one instance of book copying can have large effects. For example, if numerous companies and organizations scan books, attackers can focus their efforts on whichever installs the weakest security. Similarly, attackers can take advantage of even a brief period when a single book provider is insecure (for example, through failure to properly update a server). Once attackers obtain book copies, they can then redistribute the copies as desired. If many providers begin scanning and storing digital book copies, the affected books are only as secure as the least secure provider – so the diligent efforts of some providers would be undermined by lax security of others.

Breaches in Libraries' Systems Could Facilitate Book Piracy

20. I understand that the Google Library Project includes providing to its library partners a full digital copy of the books the libraries allowed Google to scan. Breaches in the security systems at these libraries could facilitate book piracy.

21. I have not been informed of all the ways that libraries intend to use the book contents data they receive from Google, nor have I been informed how libraries intend to secure that data. But the information currently available indicates that libraries' actions present a risk of book piracy.

22. If libraries provide book contents in a way where authorized library users can access the data, it is likely that some users will attempt to exceed the intended scope of authorization to access and copy book contents en masse. For example, in July 2011, a student used MIT library access to download 4.8 million articles and other documents.⁵

23. Structural factors also increase the difficulty of libraries properly securing book contents. University libraries typically serve myriad users including students, visitors, and others with limited long-term connection to the library – limiting a library's ability to establish accountability. Moreover, libraries typically specialize in making information available rather than in restricting how information may be used. While some libraries offer electronic resources that are subject to restrictions on use, these restrictions are typically implemented by keeping the information on the information provider's servers so that the information provider, not the library, can monitor usage and attempt to assure compliance. For example, when a library licenses journals and articles and other documents from the JSTOR digital archive, libraries do not receive full copies of the articles to store on library servers. Instead, libraries receive secure access to JSTOR servers, allowing library patrons to access individual documents on JSTOR without ever receiving the full corpus of all articles JSTOR holds. Access to documents held by Lexis-Nexis and Westlaw is similar. In contrast, the book contents here at issue would be stored on libraries' servers without an outside third party to assure and enforce compliance with access restrictions.

⁵ United States of America v. Aaron Swartz. Indictment. July 14, 2011.

24. The likely uses of digital book copies further exacerbate the risk of copying. A natural use of digital book copies is to analyze patterns in book text. From the perspective of a researcher seeking to perform such analysis, it is natural to begin by copying digital book copies onto a system the researcher controls, allowing the researcher to run flexible and high-speed searches of those book copies using the researcher's preferred tools. (In contrast, if the researcher had to run analyses on a server controlled by the library, the researcher would ordinarily be able to use only those tools the library provides, and the speed of the researcher's analysis might be constrained by server capacity and availability.) Crucially, once a researcher copies the data onto his own system, the library's prior security efforts (whatever they might be) are largely irrelevant. A researcher might even store digital book copies on a laptop or USB drive, where loss and theft are particularly frequent. When book copies are processed into text using optical character recognition, the resulting files can be quite small – making it feasible to store tens of thousands of book copies on an ordinary laptop or USB drive.

25. A further risk of book piracy from or via university libraries comes from the culture of “pranks” enjoyed by many software and engineering students. For example, the MIT Hack Gallery presents hundreds of hacks including public displays of the Apple logo, the logo of the Boston Red Sox, and the logos of various movies.⁶

26. In its agreement with the University of Michigan, Google has specifically avoided responsibility for monitoring how libraries store or use book contents. The University of Michigan agreement specifically speaks to Google's duty of care over physical books in Google's custody (including the risk of loss, damage, pests, fire, theft, and the like).⁷ However, the agreement offers limited commitments as to the University of Michigan's duty to keep secure its Digital Copy of the book contents.⁸ For example, Google's agreement with University of Michigan provides the use of robots.txt as a supposed “technological measure ... to restrict automated access” to the Digital Copy, but robots.txt offers no genuine security protection and instead relies on a requester's compliance with stated restrictions on access. The other provisions of Google's agreement with University of Michigan are vague (“reasonable efforts,” “cooperate in good faith to mutually develop methods,” etc.). These vague provisions offer significantly lower protection than Google provides for even its routine business confidences.⁹

Google Itself Is Not Immune to Design Flaws and Security Breaches

27. Despite Google's considerable resources, Google products and services nonetheless suffer from design flaws and security breaches which result in information flowing in ways Google and/or users did not intend.

⁶ <http://hacks.mit.edu/>

⁷ Cooperative Agreement between Google Inc. and Regents of the University of Michigan, sections 2.3.1 and 2.7.

⁸ Cooperative Agreement between Google Inc. and Regents of the University of Michigan, sections 4.4.1-2.

⁹ For example, the Google NDA presented at <http://valleywag.com/230407/this-nda-never-existed> offers greater protection including greater restrictions on the circumstances in which information can be shared, greater restrictions on the permissible recipients of such information, and more precise requirements as to how information must be secured.

28. In general, Google faces each of the vulnerabilities detailed in “Similar Scanning Operations Could Allow Book Copies to Be Copied and Redistributed” above. The following sections flag specific problems that could occur, as well as noting similar problems Google has already faced.

Google’s Security Systems are not Failproof

29. In other information and distribution services, Google has failed to comply with its commitments to users and the public. For example, in January 2010, I found and reported the popular Google Toolbar program – installed on “hundreds of millions” of computers¹⁰ – continuing to track users’ browsing (including every web page visited) even after users had specifically requested that the Toolbar be “disable[d]” and even after the Toolbar had confirmed users’ request and disappeared from screen.¹¹ The user browsing at issue was users’ most sensitive online activities: reasonable users would activate the Toolbar’s “disable tracking” feature exactly when they sought to engage in private activities they did not wish Google to track. Google subsequently characterized its nonconsensual information collection as “an issue”¹² but offered no explanation for why it collected information users had specifically indicated, and Google had agreed, should not be collected. Google has paid no compensation to affected users. Neither did Google promise to undo the error: Google never offered to let affected users identify themselves so Google could delete their data from its records.

30. In spring 2010, Google introduced Buzz, a social network for connecting to online colleagues and sharing information about who is doing what. For users of Google’s email service, Gmail, Buzz shared with the general public the names of the persons Gmail users corresponded with – information Google had previously indicated it would keep confidential. Google subsequently faced class litigation for this information breach, alleging that affected users suffered direct economic loss as a result of Google’s information revelation. For example, Buzz revealed the persons sending email to and receiving email from Andrew McLaughlin, who had previously served as a Google lobbyist, and was working in the White House as deputy Chief Technology Officer of the United States. Buzz’s information revelation indicated that Mr. McLaughlin had engaged in impermissible activities with his prior employers, in violation of White House ethics rules. After Buzz-posted information prompted a complaint and an investigation, Mr. McLaughlin was formally reprimanded for the improper communications.¹³ To the best of my knowledge, Google never offered any compensation to Mr. McLaughlin or other affected Gmail users.

¹⁰ Ian Paul. “Google Toolbar Tracks Some Browsing Even When It’s Not Supposed To.” PC World. January 25, 2010. http://www.pcworld.com/article/187670/google_toolbar_tracks_some_browsing_even_when_its_not_supposed_to.html.

¹¹ Benjamin Edelman. “Google Toolbar Tracks Browsing Even After Users Choose ‘Disable’.” January 26, 2010. <http://www.benedelman.org/news/012610-1.html>.

¹² Barry Schwarz. “Disabling The Google Toolbar Doesn’t Stop Google From Tracking You.” January 26, 2010. <http://searchengineland.com/disabling-the-google-toolbar-doesnt-stop-google-from-tracking-you-34438>

¹³ J. Nicholas Hoover. “White House Reprimands Deputy CTO.” Information Week. May 17, 2010. <http://www.informationweek.com/news/government/leadership/224900083>.

31. In addition, during February 2012, researchers discovered that Google was bypassing Safari and Internet Explorer privacy settings to collect data that those browsers would ordinarily decline to provide.¹⁴ While Google ceased further collection via these methods, Google has not offered to delete information improperly collected, nor has Google offered to compensate affected users.

32. In each of these examples, Google's services worked in exactly the way Google's engineers designed, in a way any Google engineer could have noticed through straightforward testing and, in many instances, in a way Google staff specifically intended. Yet Google lacked authorization for these information collection and distribution practices.

Rogue Google Employees Could Access or Redistribute Book Contents

33. In September 2010, news reports revealed that David Barksdale, a senior Google engineer, had used his privileged position at Google to spy on four teenagers for months. Because Barksdale was a Site Reliability Engineer at Google, he was able to tap into call logs for Google Voice (records of phone calls to and from the youths), read the youths' instant message chat logs, and unblock himself from buddy lists in order to send instant messages to and from the youths. Barksdale used each of these methods to access the communications of the affected youths. While Google terminated Barksdale's employment after these practices became known, Barksdale was able to continue his practices for months without Google's internal controls noticing what he was doing.¹⁵ Google subsequently admitted that it had previously caught at least one other Google staff person accessing user data without authorization.¹⁶

Hackers Could Access or Redistribute Book Contents

34. Outside hackers could access or redistribute book contents. Many hackers disagree with the public policy embodied in applicable copyright law. For example, during January 2012, hackers disabled web sites of the U.S. Department of Justice and FBI, trade associations Recording Industry Association of America and Motion Picture Association of America, and record labels Universal, BMI, and Warner Music Group, when hackers disapproved of possible revisions to copyright law then under discussion in Congress.¹⁷ Google's digitized book contents thus could attract hackers seeking to redistribute notable information.

35. In January 2010, Google reported a "highly sophisticated and targeted attack on our corporate infrastructure originating from China that resulted in the theft of intellectual

¹⁴ Jonathan Mayer. "Safari Trackers." February 17, 2012. <http://cyberlaw.stanford.edu/blog/2012/02/safari-trackers>.

¹⁵ Adrian Chen. "GCreep: Google Engineer Stalked Teens, Spied on Chats." Gawker. September 14, 2010. <http://gawker.com/5637234/gcreep-google-engineer-stalked-teens-spied-on-chats>.

¹⁶ Jacon Kincaid. "This Is the Second Time a Google Engineer Has Been Fired for Accessing User Data." TechCrunch. September 14, 2010.

¹⁷ Ingrid Lunden. "SOPA Blackout, Anonymous-Style: FBI, DOJ Sites Downed In Megaupload Protest." paidContent.org. January 19, 2012. <http://paidcontent.org/article/419-sopa-blackout-anonymous-style-doj-riaa-hacked-in-megaupload-protest/>.

property from Google.”¹⁸ A subsequent analysis by McAfee indicated that hackers had specifically sought access to the source code for Google systems, and that hackers had even obtained the ability to alter the source code for Google systems.¹⁹ If Google cannot keep its own intellectual property secure from attackers, it is plausible to conclude that Google cannot keep book contents invulnerable to security breaches.

A Single Breach Could Cause Devastating Harm to the Class

36. A single breach of the systems that store book contents could allow book contents to become ubiquitous online. In particular, after that single breach occurs, users are likely to copy and/or share the material en masse, preventing any subsequent efforts to resecure book contents. For example, on August 4, 2006, AOL posted twenty million searches performed by more than 650,000 users over a three-month period. Once AOL realized that posting this information was inadvisable (because it included myriad sensitive subjects and could be easily linked to individual AOL users), AOL removed the file from its servers the same week, but the file remains easily available, including on the web and via BitTorrent.²⁰ Similarly, Wikileaks in February 2010 began publishing hundreds of thousands of pages of classified material. The information remains easily available, including via straightforward Google searches. The information simply cannot be “unpublished” once it has become publicly available on the Internet.

37. Thus, if book contents become available once – via a breach of book copies scanned by others, via a breach in libraries’ copies of books scanned by Google, or via a breach of Google’s own systems – the book contents are likely to be available easily and indefinitely.

38. However remote one may consider the risk of book contents becoming available, that risk must be considered in light of the devastating impact to the Class if book contents become available.

Conclusion

39. If Google’s practices of digitally copying, distributing and displaying books without rightsholder permission are found to be fair uses and become widespread, the market for books will be adversely impacted by the potential for security breaches. Conversely, requiring Google and others to obtain the permission of rights-holders before engaging in such practices could prompt negotiations between rights-holders and those who seek to digitally use their works, thereby fostering standards for the allocation of the costs and risks of any harm flowing from such security breaches.

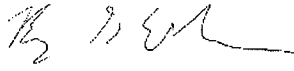
¹⁸ David Drummond. Official Google Blog. January 12, 2010.

<http://googleblog.blogspot.com/2010/01/new-approach-to-china.html>.

¹⁹ McAfee Labs. “Protecting Your Critical Assets: Lessons Learned from ‘Operation Aurora.’” March 2010. http://www.wired.com/images_blogs/threatlevel/2010/03/operationaurora_wp_0310_fnl.pdf.

²⁰ For example, I searched Google for “AOL search torrent” (without quotes) on March 27, 2012. Among the first ten results, I found six locations where I could download the files. <http://gregsadetsky.com/aol-data/> presents nine different locations where the data remains available.

Signed April 2 2012,

A handwritten signature in black ink, appearing to read 'B. Edelman', written over a horizontal line.

Benjamin Edelman

EXHIBIT A

27a Linnaean St.
Cambridge, MA 02138

Benjamin G. Edelman

ben@benedelman.org
(617) 359-3360

Experience

Assistant professor, Harvard Business School. Negotiations, Organizations & Markets unit. (April 2007 – present)

Fields: Industrial organization, market design, information economics.

Research interests: Electronic markets. Internet advertising, reputation, and fraud. Automated data collection.

Teaching: Networked businesses, market design, information systems, online marketing, negotiation.

Independent consultant and expert witness (November 1999 – present)

Conducted quantitative analyses and empirical testing for a variety of clients including the American Civil Liberties Union, AOL, Microsoft, National Association of Broadcasters, National Football League, New York Times, Universal Music Group, and Washington Post on topics including online advertising, advertising fraud, spyware, spam, pay-per-click advertising and click fraud, Internet filtering, geolocation and targeting, privacy, security, automated data collection, and user interface design.

Qualified as an expert in Federal court on multiple occasions, and provided oral testimony under direct and cross examination.

Student Fellow / Technology Analyst, Berkman Center for Internet & Society (May 1998 – January 2004)

Conducted empirical studies of the Internet's domain name system, spyware/adware, content filtering by network intermediaries.

Developed software systems for interactive real-time communication among class/meeting participants. Designed and operated system for webcast of and remote participation in numerous Berkman Center, Harvard Law School, and Cambridge community events as well as twelve ICANN public meetings.

Education

Harvard Graduate School of Arts & Sciences - Ph.D., Economics, 2007. Dissertation: "Topics in Internet Advertising."

Harvard Law School - J.D., 2005.

Harvard Graduate School of Arts & Sciences - A.M., Statistics, 2002.

Harvard College - A.B., Economics, *summa cum laude*, 2002; Phi Beta Kappa.

Woodrow Wilson Senior High School - Washington, DC: 1998; valedictorian.

Representative Research

Internet Advertising and the Generalized Second Price Auction (*American Economic Review*, 2007)
with Michael Ostrovsky and Michael Schwarz

Optimal Auction Design and Equilibrium Selection in Sponsored Search Auctions (*American Economic Review*, 2010)
with Michael Schwarz

Strategic Bidder Behavior in Sponsored Search Auctions (*Decision Support Systems*, 2007) with Michael Ostrovsky

Measuring the Perpetrators and Funders of Typosquatting (*FC'10, SV LNCS*) with Tyler Moore; web introduction and appendix also available

Greedy Bidding Strategies for Keyword Auctions (*Proceedings of the 9th ACM Conference on Electronic Commerce*, 2007)
with Matthew Cary, Aparna Das, Ioannis Giotis, Kurtis Heimerl, Anna Karlin, Claire Mathieu, and Michael Schwarz

On Best-Response Bidding in GSP Auctions (2008)
with Matthew Cary, Aparna Das, Ioannis Giotis, Kurtis Heimerl, Anna Karlin, Claire Mathieu, and Michael Schwarz

Running Out of Numbers: Scarcity of IPv4 Addresses and What To Do About It (*Proceedings of AMMA*, 2009)

Adverse Selection in Online "Trust" Certifications (*Proceedings of ICEC 2009*)

Adverse Selection in Online "Trust" Certifications and Search Results (*Electronic Commerce Research and Applications*, 2011)

Deterring Online Advertising Fraud Through Optimal Payment in Arrears (*FC'09, SV LNCS*)

Securing Online Advertising: Rustlers and Sheriffs in the New Wild West (published in *Beautiful Security*, 2009)

Assessing and Improving the Safety of Internet Search Engines (published in *The Rising Power of Search Engines on the Internet*, 2006)

Web Sites Sharing IP Addresses: Prevalence and Significance (2003) cyber.law.harvard.edu/people/edelman/ip-sharing

Empirical Analysis of Internet Filtering in China (2002) with Jonathan Zittrain cyber.law.harvard.edu/filtering/china
Published in *IEEE Internet Computing* as "Internet Filtering in China" (March-April 2003)

Long-Term Research Projects

Strategies and Outcomes in Search Engine Advertising (2004-)

"Spyware": Research, Testing, Legislation, and Suits (2002-) benedelman.org/spyware

Resources for Affiliates and Affiliate Merchants (2004-) benedelman.org/affiliates

Documentation of Internet Filtering Worldwide (2002-2003) with Jonathan Zittrain cyber.law.harvard.edu/filtering

The Top-Level Domain Evaluation Project (2002-2003) with Jonathan Zittrain cyber.law.harvard.edu/tlds

Classroom and Meeting Technology Tools (1998-2002) cyber.law.harvard.edu/meetingtools

ICANN Public Meeting Archives, Notes, and Briefing Books (1998-2001) cyber.law.harvard.edu/icann
cyber.law.harvard.edu/ifwp

Additional Writings

Advertising Disclosures: Measuring Labeling Alternatives in Internet Search Engines (2012)
with Duncan Gilchrist *Information Economics and Policy*

Internet Protocol Numbers and the American Registry for Internet Numbers: Suggested Guidance for Bankruptcy Trustees, Debtors-in-Possession, and Receivers. *BNA's Bankruptcy Law Reporter* (2012) with Steven Ryan and Matthew Martel

Pricing and Efficiency in the Market for IP Addresses (2011) with Michael Schwarz

The Design of Online Advertising Markets (forthcoming) *Handbook of Market Design*

Earnings and Ratings at Google Answers (forthcoming) *Economic Inquiry*

Bias in Search Results?: Diagnosis and Response (2011) *The Indian Journal of Law and Technology*

Measuring Bias in "Organic" Web Search (2011) with Ben Lockwood benedelman.org/searchbias

To Groupon or Not to Groupon: The Profitability of Deep Discounts (2010) *HBS Working Paper* – with Scott Kominers and Sonia Jaffe
and To Groupon or Not To Groupon: New Research on Voucher Profitability (2011) *HBR Blogs*

Least-Cost Avoiders in Online Fraud and Abuse (2010) *IEEE Security and Privacy*

The Pathologies of Online Display Advertising Marketplaces (2010) *ACM Sigecom Exchanges*

Competing Ad Auctions: Multi-homing and Participation Costs (2010) with Itai Ashlagi and Hoan Soo Lee

Priced and Unpriced Online Markets (2009) (*Journal of Economic Perspectives*, summer 2009)

Red Light States: Who Buys Online Adult Entertainment? (2009) (*Journal of Economic Perspectives*, winter 2009)

Who Owns Metrics?: Building a Bill of Rights for Online Advertisers (2009) (*Journal of Advertising Research*, Dec. 2009)

How to Combat Online Ad Fraud (2009) *Harvard Business Review*

The Dark Underbelly of Online Advertising (2009) *Harvard Business Review Online – HBR Now*

Fraud in Online Advertising (2009) *The Business Standard (India)*

Typosquatting: Unintended Adventures in Browsing (2008) McAfee Security Journal

CPC/CPA Hybrid Bidding in a Second Price Auction (2008) with Hoan Soo Lee

When the Net Goes Dark and Silent (2002) South China Morning Post (op-ed)

The Effect of Editorial Discretion Book Promotion on Sales at Amazon.com (2001-2002)

Seymour and Ruth Harris Prize for Best Thesis in Economics, Thomas Temple Hoopes Prize for Undergraduate Research

Web Site Writings

Search My Logs of Affiliate Fraud and Affiliate Fraud Information Lookup (2012) with Wesley Brandi

Hack-Based Cookie-Stuffing by Bannertracker-script (2012) benedelman.org/news/022712-1.html
with Wesley Brandi

Large-Scale Cookie-Stuffing at Eshop600.co.uk (2012) benedelman.org/news/013012-1.html with Wesley Brandi

Advertising Disclosures in Online Apartment Search (2012) benedelman.org/adlabeling/apartmentsearch
with Paul Kominers

Google Tying Google Plus and Many More (2012) benedelman.org/news/011212-1.html

Revisiting Search Bias at Google (2011) benedelman.org/news/111111-1.html

Understanding the Purposes – and Weaknesses – of Online-to-Offline Discounting Pymnts.com (2011)

Towards Improvement in Singapore's Transportation Efficiency and Environmental Impact (2011)
submission to the National Climate Change Secretariat of Singapore

Google's Dominance – And What To Do About It and Finding and Preventing Biased Results (2011)
American Constitution Society for Law and Policy – Blog Debate

Advertisers' Missing Perspective in the Google Antitrust Hearing (2011) benedelman.org/news/092011-1.html

Implications of Google's Pharmacy Debacle (2011) benedelman.org/news/082611-1.html and republished at Betanews

Online Discount Vouchers – Letter-Writing Tool (2011) vouchercomplaints.org with Paul Kominers & Xiaoxiao Wu

Consumer Protection in Online Discount Voucher Sales (2011) benedelman.org/voucher-consumer-protection
with Paul Kominers

Revisiting Unlawful Advertisements at Google (2011) benedelman.org/news/051811-1.html and excerpted at
Huffington Post

Personal Rapid Transport - Environmental Issues for Earth Day (2011) hbs.edu/news/releases/earthday042011.html

Remedies for Search Bias (2011) benedelman.org/news/022211-1.html

In Accusing Microsoft, Google Doth Protest Too Much (2011) *HBR Blogs*

Knowing Certain Trademark Ads Were Confusing, Google Sold Them Anyway -- for \$100+ Million (2010)
benedelman.org/news/113010-1.html

Advertisers Should Raise Their Voices Against Arrogant Google (2010) *mUmBRELLA*

Hard-Coding Bias in Google 'Algorithmic' Search Results (2010) benedelman.org/hardcoding

A Closer Look at Google's Advertisement Labels (2010) benedelman.org/adlabeling/google-nov2010.html

On Facebook and Privacy (2010) www.hbs.edu/news/releases/facultyonfacebookprivacy.html

Tying Google Affiliate Network (2010) benedelman.org/news/092810-1.html

Facebook Leaks Usernames, User IDs, and Personal Details to Advertisers (2010)
benedelman.org/news/052010-1.html

Sony's Crackle: Invisible Traffic Galore (2010) benedelman.org/news/042710-1.html

Protecting Privacy by Design (2010) *McAfee AVERT Blog*

Google's Privacy Breach: Lessons for Companies (2010) *Harvard Business Review Online – HBR Now*

Google Toolbar Tracks Browsing Even After Users Choose "Disable" (2010) benedelman.org/news/012610-1.html

Upromise Savings -- At What Cost? (2010) benedelman.org/news/012110-1.html

Google Still Charging Advertisers for Conversion-Inflation Traffic (2010) benedelman.org/news/010510-1.html

Towards a Bill of Rights for Online Advertisers (2009) benedelman.org/advertisersrights
(excerpted in Advertising Week Welcome Guide, excerpted in Huffington Post)

Payment Card Network Rules Prohibit Aggressive Post-Transaction Tactics (2009)
benedelman.org/posttransaction/cardnetworks

Deception in Post-Transaction Marketing Offers (2009) benedelman.org/posttransaction (including Senate testimony)

How Google and Its Partners Inflate Measured Conversion Rates and Increase Advertisers' Costs (2009)
benedelman.org/news/051309-1.html

In Support of Utah's HB450 (2009) benedelman.org/news/030909-1.html

False and Deceptive Display Ads at Yahoo's Right Media (2009) benedelman.org/rightmedia-deception

Privacy Lapse at Google JotSpot (2008) benedelman.org/google-jot-privacy

Hydra Media's Pop-Up Problem -- Ten Examples (2008) benedelman.org/news/101408-1.html

CPA Advertising Fraud: Forced Clicks and Invisible Windows (2008) benedelman.org/news/100708-1.html

Auditing Spyware Advertising Fraud: Wasted Spending at VistaPrint (2008) benedelman.org/news/093008-1.html

PPC Platform Competition and Google's "May Not Copy" Restriction (2008) benedelman.org/news/062708-1.html

Debunking Zango's "Content Economy" (2008) benedelman.org/news/052808-1.html

Coupons.com and TRUSTe: Lots of Talk, Too Little Action (2008) benedelman.org/news/031808-1.html

Delaying Payment to Deter Online Advertising Fraud (2008) benedelman.org/paymentdelay

Critiquing C-NetMedia's Anti-Spyware Offerings and Advertising Practices (2008)
benedelman.org/news/021408-1.html

Sears Exposes Customer Purchase History in Violation of Its Privacy Policy (2008)
benedelman.org/news/010408-1.html

The Sears "Community" Installation of ComScore (2008) benedelman.org/news/010108-1.html

A Closer Look at Coupons.com (2007) benedelman.org/news/082807-1.html

Spyware Still Cheating Merchants and Legitimate Affiliates (2007) benedelman.org/news/052107-1.html

How Spyware-Driven Forced Visits Inflate Web Site Traffic Counts (2007) benedelman.org/news/050707-1.html

Advertising Through Spyware -- After Promising To Stop (2007) benedelman.org/news/031407-1.html

Why I Can Never Agree with Adware and Spyware (2007)
technology.guardian.co.uk/online/insideit/story/0,,1997629,00.html

Bad Practices Continue at Zango (2006) with Eric Howes benedelman.org/news/112006-1.html

Intermix Revisited (2006) benedelman.org/news/110806-1.html

Current Ask Toolbar Practices (2006) benedelman.org/spyware/ask-toolbars

False and Deceptive Pay-Per-Click Ads (2006) benedelman.org/ppc-scams

Cookies Detected by Anti-Spyware Programs: The Current Status (2006)

www.vinnylingham.com/specialreports/cookiedetections

How Vonage Funds Spyware (2006) benedelman.org/news/071806-1.html

Spyware Showing Unrequested Sexually-Explicit Images (2006) benedelman.org/news/062206-1.html

Banner Farms in the Crosshairs (2006) benedelman.org/news/061206-1.html

The Safety of Internet Search Engines (2006) siteadvisor.com/studies/search_safety_may2006 with Hannah Rosenbaum

New York v. Direct Revenue, LLC - Documents and Analysis (2006) benedelman.org/spyware/nyag-dr

The Spyware - Click-Fraud Connection - and Yahoo's Role Revisited (2006) benedelman.org/news/040406-1.html

Advertisers Funding Direct Revenue (2006) benedelman.org/spyware/images/dr-mar06

Critiquing ITSA's Pro-Adware Policy (2006) benedelman.org/news/033106-2.html

Advertisers Funding 180solutions (2006) benedelman.org/spyware/images/180-jan06

Nonconsensual 180 Installations Continue (2006) benedelman.org/news/022006-1.html

Pushing Spyware through Search (2006) benedelman.org/news/012606-1.html

Affiliate Hall of Shame (2006) benedelman.org/news/011606-1.html

180solutions's Misleading Installation Methods - Dollidol.com (2006)

benedelman.org/spyware/installations/dollidol-180

Scanning for Solutions (2005) publications.mediapost.com/index.cfm?fuseaction=Articles.san&s=37284

What Claria Doesn't Disclose (Any More) (2005) benedelman.org/news/111505-1.html

Claria Shows Ads Through Exploit-Delivered Popups (2005) benedelman.org/news/101805-1.html

Video: New.net Installed through Security Holes (2005) benedelman.org/news/100505-1.html

How Affiliate Programs Fund Spyware (2005) benedelman.org/news/091405-1.html

How Expedia Funds Spyware (2005) benedelman.org/news/090705-1.html

How Yahoo Funds Spyware (2005) benedelman.org/news/083105-1.html

What Passes for "Consent" at 180solutions (2005) benedelman.org/news/062805-1.html

Google's Role: Syndicated Ads Shown Through Ill-Gotten Third-Party Toolbars (2005)

benedelman.org/news/060605-1.html

Ask Jeeves Toolbar Installs via Banner Ads at Kids Sites (2005)

benedelman.org/spyware/installations/askjeeves-banner

Hotbar Installs via Banner Ads at Kids Sites (2005) benedelman.org/spyware/installations/kidzpage-hotbar

The 180 Turnaround That Wasn't (2005) adbumb.com/adbumb159.html

The PacerD Installation Bundle (2005) benedelman.org/spyware/installations/pacerd

Claria's Misleading Installation Methods - Ezone.com (2005) benedelman.org/spyware/installations/ezone-claria

Claria's Misleading Installation Methods - Dope Wars (2005) benedelman.org/spyware/installations/dopewars-claria

180solutions's Misleading Installation Methods - Ezone.com (2005) benedelman.org/spyware/installations/ezone-180

3D Desktop's Misleading Installation Methods (2005) benedelman.org/spyware/installations/3d-screensaver

Comparison of Unwanted Software Installed by P2P Programs (2005) benedelman.org/spyware/p2p

Advertisers Supporting eXact Advertising (2005) benedelman.org/spyware/exact-advertisers

How Google's Blogspot Helps Spread Unwanted Software (2005) benedelman.org/news/022205-1.html

How VeriSign Could Stop Drive-By Downloads (2005) benedelman.org/news/020305-1.html

Intermediaries' Role in the Spyware Mess (2005) benedelman.org/news/052305-1.html

Media Files that Spread Spyware (2005) benedelman.org/news/010205-1.html

Video: Ebates Installed through Security Holes (2004) benedelman.org/news/121504-1.html

Direct Revenue Deletes Competitors from Users' Disks (2004) benedelman.org/news/120704-1.html

Who Profits from Security Holes? (2004) benedelman.org/news/111804-1.html

Gator's EULA Gone Bad (2004) benedelman.org/news/112904-1.html

Grokster and Claria Take Licenses to New Lows, and Congress Lets Them Do It (2004)
benedelman.org/news/100904-1.html

California's Toothless Spyware Law (2004) benedelman.org/news/092904-1.html

The Effect of 180solutions on Affiliate Commissions and Merchants (2004) benedelman.org/spyware/180-affiliates

WhenU Spams Google, Breaks Google "No Cloaking" Rules (2004) benedelman.org/spyware/whenu-spam

WhenU Copies 26+ Articles from 20+ News Sites (2004) benedelman.org/spyware/whenu-copy

Advertisers Using WhenU (2004) benedelman.org/spyware/whenu-advertisers

WhenU Security Hole Allows Execution of Arbitrary Software (2004) benedelman.org/spyware/whenu-security

WhenU Violates Own Privacy Policy (2004) benedelman.org/spyware/whenu-privacy

Methods and Effects of Spyware (FTC Comments) (2004) benedelman.org/spyware/ftc-031904.pdf

A Close Reading of Utah's Spyware Control Act (2004) benedelman.org/spyware/utah-mar04

Blocked Sites will Return, but with Limited Access (2003) South China Morning Post (op-ed)

Web Sites Sharing IP Addresses: Prevalence and Significance (2003)
cyber.law.harvard.edu/people/edelman/ip-sharing

Documentation of Gator Advertisements and Targeting (2003) cyber.law.harvard.edu/people/edelman/ads/gator

Empirical Analysis of Google SafeSearch (2003) cyber.law.harvard.edu/people/edelman/google-safesearch

Large-Scale Registration of Domains with Typographical Errors (2003) cyber.law.harvard.edu/people/edelman/typo-domains

Technical Responses to Unilateral Internet Authority: The Deployment of VeriSign "Site Finder" and ISP Response (2003) with Jonathan Zittrain cyber.law.harvard.edu/tlds/sitefinder

Compliance with UDRP Decisions: A Case Study of Joker.com (2003) cyber.law.harvard.edu/people/edelman/udrp-compliance

Domain Name Typosquatter Still Generating Millions (2003) circleid.com/article/101_0_1_0_C

Localized Google Search Result Exclusions (2002-2003) with Jonathan Zittrain cyber.law.harvard.edu/filtering/google

Defensive Registrations: Why They're Still Needed, and How to Make Them Earn Their Keep (2002)
Verisign Digital Brand Management Digital Branding Bulletin, www.verisign.com/services/cdns/news/columnist_200212.html

Documentation of Internet Filtering in Saudi Arabia (2002) with Jonathan Zittrain
cyber.law.harvard.edu/filtering/saudi-arabia

Localized Google Search Result Exclusions (2002) with Jonathan Zittrain cyber.law.harvard.edu/filtering/filtering/google

Analysis of Domain Reregistrations Used for Distribution of Sexually-Explicit Content (2002)
cyber.law.harvard.edu/people/edelman/renewals

Large-Scale Intentional Invalid WHOIS Data (2002) cyber.law.harvard.edu/people/edelman/invalid-whois

.NAME Registrations Not Conforming to .NAME Registration Restrictions (2002)
cyber.law.harvard.edu/people/edelman/name-restrictions

Alternative Perspectives on Registrar Market Share (2002) cyber.law.harvard.edu/people/edelman/registrar-choice

DNS as a Search Engine: A Quantitative Evaluation (2002) cyber.law.harvard.edu/people/edelman/dns-as-search

Disputed Registrations in .BIZ (2002) cyber.law.harvard.edu/people/edelman/biz-sunrise

TLD Registration Enforcement: A Call for Automation (2002) circleid.com/article/66_0_1_0_C
circleid.com/article/72_0_1_0_C

Invalid WHOIS Data: Who Is Responsible? (2002) circleid.com/article/79_0_1_0_C

iCravetv.biz/Entervision Retransmits CNN, Cartoon Network, PAX TV, California NBC Affiliate (2002)
cyber.law.harvard.edu/people/edelman/icrave

Analysis of Registrations in Alternative Root TLDs (2001)
cyber.law.harvard.edu/people/edelman/dotbiz and [/people/edelman/dotweb](http://people/edelman/dotweb)

Documentation of Privacy and Security Shortcomings at Buy.com (2000)
cyber.law.harvard.edu/people/edelman/buy-privacy.html

Understanding and Critiquing ICANN's Policy Agenda (2000)
cyber.law.harvard.edu/icann/pressingissues2000/briefingbook

Software Environments for Online Deliberative Discourse (1999-2000) cyber.law.harvard.edu/projects/deliberation

Executive Summaries of Formative ICANN Documents (1999)
cyber.law.harvard.edu/pressbriefings/icann/briefingbook/executivesummaries.html

ICANN and the Public Interest: Pressing Issues (1999) cyber.law.harvard.edu/icann/workshops/la/briefingbook

Using Trumpet Winsock on Netcom Netcruiser Accounts (1995) cyber.law.harvard.edu/people/edelman/trumpet.html

Teaching Cases and Notes

Airbnb (A) and (B) (HBS Case 912-019, -020) (and TN) (2011) with Michael Luca

Attack of the Clones: Birchbox Defends Against Copycat Competitors (HBS Case 912-010) (2011) with Peter Coles

The Online Economy: Strategy and Entrepreneurship - Course Architecture Note (HBS Note 911-069) (2011)
 with Peter Coles

Mobilizing Online Businesses (HBS Module Note 911-048) (2011) with Peter Coles

Online Marketing at Big Skinny (HBS Case 911-033) (and TN) (2011) with Scott Kominers

The iPhone at IVK (TN) (HBS Teaching Note 911-414) (2010)

Akamai, Inc. (HBS Case 804-158) (2010) with Thomas Eisenmann and Eric Van den Steen

Google Inc. and Google Inc. (Abridged) (HBS Case 910-036 and 910-032) (2010) (and TN) with Thomas Eisenmann

Personal Rapid Transport at Vectus, Inc. (HBS Case 910-010) (2010) (and TN)

eBay Partner Network (A), (B), and (C) (HBS Case 910-008, -009, and -012) (2009) (and TN) with Ian Larkin

Symbian, Google & Apple in the Mobile Space (A) and (B) (HBS Case 909-055, -056) (2009)
 with F. Suarez & A. Srinivasan

Distribution at American Airlines (A) and (B) (HBS Case 909-035 and -036) (and TN) (2009)

Windows Vista (HBS Case 909-038) (2009)

Online Restaurant Promotions (HBS Case 909-034) (and TN) (2009)
 Ad Classification at Right Media (HBS Case 909-032) (and TN) (2009)
 Consumer Payment Systems – United States (HBS Case 909-006) (2009) (and TN) with Andrei Hagiu
 Consumer Payment Systems – Japan (HBS Case 909-007) (2009) (and TN) with Andrei Hagiu
 TheLadders (HBS Case 908-061) (2008) (and TN) with Peter Coles, Brian Hall, and Nicole Bennett
 Opening Dot EU (A) and (B) (HBS Case 908-052 and -053) (2008)
 Microsoft adCenter (HBS Case 908-049) (and TN) (2008) with Peter Coles

Programming Experience

Microsoft Visual Basic (15+ years experience), VB.NET	Mathworks MatLab	Stata
SPlus / R	Python	PHP

Awards

Emerald Citations of Excellence Award (2011)
 ECCH Award for Outstanding Contribution to the Case Method – Strategy and General Management (2011)
 Best Paper Award, Honorable Mention – The 11th International Conference on Electronic Commerce (2009)
 Harvard University Graduate Economics Fellowship (2003-2006)
 John M. Olin Fellowship in Law and Economics (2003-2004, 2004-2005)
 Hoopes Prize for Undergraduate Research (2002)
 Seymour and Ruth Harris Prize for Best Honors Thesis in Economics (2002)
 John Harvard Scholarship, Harvard College (1998-1999, 1999-2000, 2000-2001)
 Rank I Honors, Harvard College (1998-1999, 1999-2000, 2000-2001)
 Phi Beta Kappa, Harvard College (2001)
 Undergraduate Honors Research Scholarship, Department of Economics, Harvard College (2001)
 Detur Prize, Harvard College (1999)

Congressional and Expert Testimony

US Senate, Commerce Committee (2009) (statement for the record)
 US House of Representatives, Committee on the Judiciary (2008) (invited / hearing cancelled)
 US Senate, Committee on Commerce, Science, and Transportation (2008)
 Federal Trade Commission Public Hearing on Effectiveness of CAN-SPAM (2005)
 District Court, Third Judicial District of Utah (2004)
 US Federal Court, Eastern District of Michigan (2003)
 US House of Representatives, Committee on the Judiciary (2003)
 US Federal Court, Eastern District of Pennsylvania (2002)
 US Federal Court, Western District of Pennsylvania (2000)

Academic Service

Associate Editor: Journal of Economic Perspectives (2008-2012)

Referee: American Economic Review, Quarterly Journal of Economics, Journal of Applied Economics, RAND Journal of Economics, Management Science, Journal of Economics & Management Strategy, Sponsored Search Workshop, Workshop on the Economics of Information Security, Workshop on the Economics of Securing the Information Infrastructure, Manufacturing & Services Operations Management, The International Conference on Electronic Commerce (2009), International Review of Law and Economics, Journal of Industrial Economics, Operations Research, Berkeley Electronic Press – Policy & Internet, Review of Economic Studies, Economics Letters, Management Science, Review of Industrial Organization, Telecommunications Policy, Emerald Program

Program committee: Workshop on the Economics of Securing the Information Infrastructure (2006), Sponsored Search Workshop (2007), WWW2008, Fourth Workshop on Ad Auctions (2008), The First Conference on Auctions, Market Mechanisms and Their Applications (2009), ACM Conference on Electronic Commerce (2010), Workshop on the Economics of Information Security (2010), Workshop on the Economics of Information Security (2011), Seventh Workshop on Ad Auctions (2011), The Second Conference on Auctions, Market Mechanisms and Their Applications (2011), WWW2012

Co-organizer: Sixth Workshop on Ad Auctions (2010)

Non-resident tutor / senior common room member: Cabot House (2004-2012)

EXHIBIT B

Benjamin Edelman – Prior Testimony at Trial or Deposition

Proceeding	Court	Reference	Context	Year	On behalf of
State of South Carolina v. Casale Media, Inc., et al.	South Carolina Court of Common Pleas, Richland County	08-CP-40-0729	Deposition	2008	Plaintiff
UMG Recordings, Inc., et al. v. Veoh Networks, Inc., et al.	U.S. District Court, Central District of California	No. CV 07-5744 AHM (AJWx)	Deposition	2009	Plaintiff
Netscape Communications Corp. v. Valueclick, Inc., et al.,	U.S. District Court, Eastern District of Virginia	No. 1:09-cv-225-TSE-IDD	Deposition	2009	Plaintiff
Arista Records, et al., v. Myxer, Inc., et al.	U.S. District Court, Central District of California	No. CV 08-03935 GAF (JCx)	Deposition	2009	Plaintiff
Stephanie Lens v. Universal Music Corp., et al.	United States District Court, Northern District of California	No. C 07-03783 JF (PVT)	Deposition	2010	Defendant

EXHIBIT C

Exhibit C to Edelman Report

1. The Fourth Amended Class Action Complaint
2. Google Objections and Responses to Plaintiffs' First Requests for Admissions
3. Plaintiffs' Brief in Support of Their Motion for Class Certification
4. Zack Decl. and Exhibits in support of motion for class certification
5. Google's Brief in Opposition to Class Certification
6. Declarations of Daniel Clancy, dated February 11, 2010, and February 7, 2012
7. Plaintiffs' brief in opposition to Google's motion to dismiss the Authors Guild
8. Cooperative Agreement between Google and the University of Michigan (from the University of Michigan website)
9. The Complaint and Plaintiffs' brief in support of motion for partial judgment on the pleadings in *Authors Guild, et al. v. Hathitrust, et al.*, 11 Civ. 6351 (HB)(S.D.N.Y.)
10. Defendant Google Inc.'s Supplemental Narrative Responses and Objections to Plaintiffs Second Request for Production of Documents and Things – Public Redacted Version
11. The books.google.com website
12. The materials cited in my report

EXHIBIT 3

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

----- X
The Authors Guild, Inc., Associational Plaintiff,
Betty Miles, Joseph Goulden, and Jim Bouton,
individually and on behalf of all others similarly
situated,

Case No. 05 CV 8136-DC

Plaintiffs,
v.

ECF Case

Google Inc.,

Defendant.
----- X

REPORT OF PROFESSOR DANIEL GERVAIS

A. INTRODUCTION AND BACKGROUND

1. I have been retained by Plaintiffs as an expert on issues of intellectual property, and collective licensing of intellectual property.

2. I am FedEx Research Professor of Law at Vanderbilt University Law School and Director of the Vanderbilt Intellectual Property Program.

3. I am an expert in the field of intellectual property law. I have taught intellectual property law at various institutions in the U.S., Europe, and Canada. I have edited or contributed to 33 books related to intellectual property; and have written publications on intellectual property law for journals around the world, including the *Journal of the Copyright Society of the USA* (my article won the Charles B Seton Award in 2002-03), *Columbia Journal of Law & the Arts*, *Fordham Law Review*, *Cardozo Arts & Entertainment Law Journal*, *European Intellectual Property Review*, *American Journal of International Law*, *Chicago-Kent Law Review*, *Vanderbilt Journal of Technology and Entertainment Law* and the *Journal of Intellectual Property Law*. I have been cited in a decision by the Supreme Court of the United States (*Golan v. Holder*, 2011),

and in decisions by many other courts. A recent article was republished in *Intellectual Property Law Review* (2011) as one of the best intellectual property articles of 2010.

4. One of my special interests is in “collective management” of copyright, meaning how aggregations of individual copyrights are legally protected, licensed, and marketed. I authored the first chapter of a 2010 book I edited on this subject, entitled “Collective Management of Copyright: Theory and Practice in the Digital Age.”

5. In January 2011, I gave the keynote talk at an event on collective management of copyright organized by the Kernochan Center for Law, Media and the Arts at Columbia Law School. An updated version of my presentation was published under the title “The Landscape of Collective Management.”¹

6. Prior to my teaching career, I served as Head of the Copyright Projects Section at the World Intellectual Property Organization (WIPO). In that capacity, I was asked to help establish new, or improve the functioning of existing, Collective Management Organizations (CMOs) in various countries around the world.

7. I also served as Deputy Secretary General of the International Confederation of Societies of Authors and Composers, the largest association of copyright collectives in the world; and as Vice-President of Copyright Clearance Center, Inc., based in Danvers, MA, during which time I was also Deputy Chair of the International Federation of Reprographic Rights Organizations (IFRRO), a worldwide association of CMOs, specializing in reprography (photocopying and digital reproduction of printed content). I have spoken at over 130 academic, professional and other conferences and events, discussing various issues related to intellectual property, including copyright law of the United States, international copyright law and the TRIPS Agreement.

¹ 24:4 COLUM-VLA J. L & ARTS 423-449 (2011).

8. I also serve as Editor-in-Chief of the *Journal of World Intellectual Property*, published jointly by John Wiley & Sons (New York) and Blackwell Publishing (Oxford, UK).

9. My complete curriculum vitae is attached here to as Exhibit A. The facts and data I considered in forming my opinion are listed on Exhibit B. I have not testified as an expert at trial or by deposition in the last four years. I am being compensated for my time at the rate of \$400 per hour.

B. MY OPINION

10. It is my understanding that Google has engaged in the digital copying of millions of books in libraries, the distribution of digital copies of these books to libraries, and display of “snippets” from these books in search results. I have been asked my opinion (a) whether collective licensing markets will continue to develop for the digital uses of books and (b) whether unrestricted and widespread conduct of the type engaged in by Google will harm the development of such markets. As I discuss in greater detail below, in my opinion, the answer to each of these questions is the affirmative.

11. I believe that, if Google’s uses are determined not to be fair uses, the market would intervene and one or more CMOs (with proper authorizations from right holders) would license Google (and potentially others) to scan, distribute and display copyrighted works. In fact, as discussed further below, the type of copyrighted content that Copyright Clearance Center, Inc. presently licenses is essentially printed content, much of the same nature as the material scanned by Google. The rights involved are also essentially the same. In other words, this type of licensing is already a reality.

12. Collective management is already indispensable for many categories of content creators and for many types of copyright uses, including online uses. The value of copyright

rights to authors and other copyright owners is often monetized not in individual transactions (authorizing the use of one or more specific works) but in licensing their rights in aggregated form, as part of a “repertory” of works or rights. This allows markets for those repertoires of works and rights to form and to operate, allowing access to and uses of copyrighted material while compensating creators for their work. Collective licensing markets have often developed in response to new technologies and uses and will continue to develop for digital uses of books unless widespread copying of entire books is permitted as a fair use, thus discouraging the development of such collective licenses.

13. Making books and other copyrighted works available online is desirable both for authors and readers. Technologically, it may be inevitable. It is likely to become a major form of access to content. It may also facilitate access by people with disabilities.

14. Allowing the market, or Congress, to develop a collective licensing system for the types of uses that Google has been making would not prevent these uses. Instead, it would compensate those who created and published the content and whose ability to earn a living often depends on being able to monetize online uses. The actual scope of the uses could be taken into account in determining appropriate rates. Collective management solutions can be applied to manage this type of licensing transaction, as the existence of successful similar collective systems demonstrates.

15. An argument that collective management is not possible or desirable in this case because there are many different types of books is negated by the existence of successful licensing systems for more than two centuries that have combined works of a similar form but with different content into repertoires. Collective Management Organizations license old and new works. Today, existing collective rights music organizations license everything from Philip

Glass to the latest hip-hop hit. CMOs typically pay authors and other right holders based on actual usage.

16. Collective licensing was the thrust of the proposed settlement in this case. The proposed Book Rights Registry was a form of collective management with a repertory license allowing Google to use millions of titles. The Registry would have maintained a database of rights information, received on behalf of the rightsholders the agreed payments from Google, and distributed those payments to rightsholders who had registered their works with the Registry.

17. It is my opinion that a similar type of collective management system, most likely one requiring that rightsholders opt their books in to participate in collective management, would develop here if some or all of Google's uses are found not to be fair. Further, it is my opinion that, if conduct such as Google's is permitted and becomes widespread, this will harm or impede the development of such a collective management model.

C. BASES FOR THE OPINION

(1) The Emergence and Basic Operations of Copyright Management Organizations

18. Collective management reportedly emerged around 1777 in France, when authors of theatrical plays formed an association to license their plays.² In the United States, collective

² In 1838, Honoré de Balzac and Victor Hugo established the Society of French Writers, (known in French as Société des gens de lettres. *See* online : <<http://www.sgdl.org/>> (last visited : March 28, 2012), which was mandated with the collection of royalties from print publishers. A net of authors' societies, shaped by the cultural environment of each country, slowly spread throughout the world. *Id.* at 10. Around the same time, the Universal Theatrical Society was established. *See* www.answers.com/topic/firmin-g-mier (last visited: March 28, 2012).

Both of these initiatives led to the founding congress in 1926 of the International Confederation of Societies of Authors (CISAC). *See* www.cisac.org (last visited: March 28, 2012).

The founding members identified the need to establish both uniform principles and methods in each country for the collection of royalties and the protection of works, and to ensure that copyright was protected throughout the world. (By "world", I am referring only to the Western World. This is inclusive of the Anglo-Saxon and *droit d'auteur* traditions of copyright.)

Today, CISAC has 232 members in 121 countries. *See* <http://www.cisac.org/CisacPortal/initConsultDoc.do?idDoc=22994> (last visited: March 28, 2012).

management developed as technology and markets made possible the widespread and dispersed infringement of copyrights. Broadcasters were considered “pirates,” until their use of music was licensed by performing rights organizations (PROs). ASCAP, BMI and SESAC are the three PROs identified as such in 17 U.S.C. §101. The first PRO, the American Society of Composers and Publishers (ASCAP), was formed in 1914.

19. Collective management provides a number of advantages in licensing uses of copyrights. CMOs are a single-source for the licensing of specific uses, thereby eliminating the need for individually negotiated licenses from each copyright owner. By reducing the transaction costs associated with enforcing, on the one hand, and licensing, on the other, they help convert widespread infringement into markets. This benefits authors and users.

(2) Collective Management in the Copyright Act

20. The Copyright Act regulates CMOs in the United States in a variety of ways. For example, PROs are named in section 101. Section 115 establishes a compulsory license for making and distributing phonorecords. When certain uses are determined by Congress to be desirable but subject to a payment to authors, Congress may establish a compulsory license. Such a system is now in place to set rates for non-interactive transmissions of sound recordings.³

21. A brief review of the legislative history might be helpful to illuminate the issue at hand.

22. The initial focus of legislative action was the collective management of music. In the 1897 Act, Congress prohibited unauthorized public performances generally.⁴ However, in the Copyright Act of 1909, Congress limited the prohibition to those done “for profit.”⁵

For 2010, CISAC members reported collections of \$9.9 billion. *See id.*

³ Section 114 and chapter 8 of Title 17 of the United States Code.

⁴ *Id.*

⁵ *Id.*

23. Not surprisingly, within a few years of the 1909 Act's enactment, the need to define "for profit" emerged.⁶ In *Herbert*, the Supreme Court, in the words of Justice Holmes, explained that the notion should be defined fairly broadly:

The defendants' performances are ... part of a total for which the public pays, and the fact that the price of the whole is attributed to a particular item which those present are expected to order, is not important. It is true that the music is not the sole object, but neither is the food, which probably could be got cheaper elsewhere. The object is a repast in surroundings that to people having limited powers of conversation or disliking the rival noise give a luxurious pleasure not to be had from eating a silent meal. If music did not pay it would be given up. If it pays it pays out of the public's pocket. Whether it pays or not the purpose of employing it is profit and that is enough.⁷

24. The Court thus established the need for the public performance licenses that ASCAP and now the other PROs provide.⁸ This is a good example of infringement preceding the establishment of a working collective licensing system.

25. When Congress enacted the Copyright Act of 1976,⁹ it did away with the "for profit" language of the 1909 Act. However, Congress also expressly exempted from copyright liability "the public reception of [a transmission embodying a performance of a work] on a single receiving apparatus" where no separate charge was made to see or hear the transmission.¹⁰

26. In an effort to adapt the statute to technological change, in the Digital Performance Right in Sound Recordings Act of 1995, Congress enacted a limited digital public

⁶ See *Herbert v. Shanley Co.*, 242 U.S. 591 (1917) [*Herbert*]; *John Church Co. v. Hilliard Hotel Co.*, 221 F. 229 (2nd Cir. 1915). The named plaintiff in *Herbert v. Shanley Co.*, Victor Herbert, was a founding member of ASCAP, and brought the case as a test case to establish a broader scope for the right of public performance.

⁷ See *Herbert*, *id.*

⁸ Exempted from license fees in the 1909 Act were certain charitable performances and for jukeboxes.

⁹ Act of October 19, 1976, Pub. L. No. 553, 94th Cong., 1st Sess., 90 Stat. 2586, codified as amended at 17 U.S.C. §§ 1-1332 (2005).

¹⁰ *Id.* at § 110(1), (2), (3), (4), (6), (8), (9), codified as amended 17 U.S.C. § 110(1), (2), (3), (4), (6), (8), (9) (2005).

performance right for sound recordings, contained in 17 U.S.C. § 114.¹¹ Congress then provided a compulsory license for non-interactive transmissions - that do not enable a member of the public to receive, on request, a transmission of a particular sound recording or a program specially created for the recipient.¹² The Act also tasked the U.S. Copyright Office to designate a CMO to administer the license, which it did, naming SoundExchange, Inc.¹³

27. The 1995 amendments did not follow the antitrust regulation model that applies to ASCAP and BMI. Instead, Congress opted for a more specialized and modern form of regulation of collective management. Under this new regulatory model, the Act gave the Library of Congress (of which the Copyright Office forms part) the authority to set rates and licensing conditions. The Act also set a distribution key according to which SoundExchange distributes 50% of the revenues to the sound recording copyright owners, 45% to the featured artists, and 5% to an independent administrator to distribute to non-featured artists and vocalists. Licensing rates are set by Copyright Royalty Judges (CRJs)¹⁴ appointed by the Librarian of Congress for six-year terms.

(3) The Copyright Clearance Center

28. A different, voluntary model emerged when Copyright Clearance Center, Inc. (“CCC”) was formed in 1978 as a New York not-for-profit corporation. Publishers and authors register their works with the CCC and set the fee for use of their works in CCC’s several per-use license services. CCC also offers annual repertory licenses in both the business and academic

¹¹ 104 Pub. L. No. 39, 109 Stat. 336 (1995).

¹² 17 U.S.C. § 114(d)(2), (f)(2) (2009); *see also* *Bonneville Int’l Corp. v. Peters*, 347 F.3d 485, (3d Cir. 2003) (affirming Copyright Office’s decision to require a compulsory license for simultaneous transmission of a radio station’s broadcast through the Internet).

¹³ *See* 17 U.S.C. § 114(g)(2); and Notice of Designation As Collective Under Statutory License filed with the Licensing Division of the Copyright Office in accordance with Copyright Office regulation 270.5(c), 37 C.F.R. § 270.5(c).

¹⁴ 17 U.S.C. §§ 801-805 (2009).

markets. For the year ended June 30, 2011, CCC reported revenues in excess of \$238 million and payments to right holders in excess of \$171 million.¹⁵ According to its website, CCC licenses business users, under one or more of its repertory or per-use licenses, the right to photocopy an article from a newspaper, magazine, book, journal, research report or other published document; e-mail an online article or PDF; post digital content on their corporate Web sites, intranets and extranets; print out Web-based and other digital content onto paper and overhead slides; republish content in a newsletter, book or journal; and scan printed content into digital form when an electronic version is not readily available.¹⁶ For academic institutions, again under one or more of its repertory or per-use services, it licenses the right to photocopy material from books, newspapers, journals and other publications for use in coursepacks and classroom handouts; use and share information in library reserves, interlibrary loan and document delivery services; post and share content electronically in e-reserves, course management systems, e-coursepacks and other e-learning environments; distribute content via e-mail or post it to their intranets, Internet and extranet sites; and republish an article, book excerpt or other content in their own books, journals, newsletters and other materials.¹⁷

(4) Other Collective Management Organizations

29. Today, CMOs in the United States license: (a) musical works (primarily the three PROs and Harry Fox Agency (HFA) which licenses mostly the reproduction of musical works); (b) sound recordings and the artists' performances they contain (Sound Exchange); and (c) photocopying and digital reprography (Copyright Clearance Center, Inc. or CCC), to name the

¹⁵ The difference between the two numbers includes but is not all a service charge. Due to the time period required to process usage data, the 2011 distributions were mostly of 2010 collections which were significantly lower than 2011 collections. See <http://annualreport.copyright.com/management-summary-financial-data>.

¹⁶ See www.copyright.com.

¹⁷ See *id.*

most well-known organizations. In addition, a form of collective management is used to collect and distribute residuals to certain actors, directors and screenwriters by the audiovisual guilds.

30. CMOs typically operate as follows: Once established (sometimes an authorization is required to operate as a CMO, as was the case for SoundExchange¹⁸), a CMO needs the authority to license a repertory of works, performances or recordings and/or to collect a license fee. The authority may be granted by law, as when a compulsory or statutory license is in place¹⁹, or by contracts with individual right holders or other CMOs. With that authority, a CMO can license and/or collect fees on the basis of rates (also known as “tariffs”). Those rates may be set by a governmental authority such as the Legislative Branch as in section 115 of the Copyright Act or in section 114 by the Copyright Royalty Judges for SoundExchange, or by the Judiciary Branch, such as the federal judges operating as rate courts under the ASCAP and BMI consent decrees.²⁰ At other times, the rates are set by rightholders, as is the case with CCC.²¹

¹⁸ See *infra* note 13.

¹⁹ According to the US Copyright Office, there are eight compulsory and statutory licenses in the Copyright Act (the Copyright Office also notes that the “terms ‘compulsory’ and ‘statutory’ are interchangeable”):

Section 111 - Statutory License for Secondary Transmissions by Cable Systems

Section 112 - Statutory License for Making Ephemeral Recordings

Section 114 - Statutory License for the public performance of Sound Recordings by Means of a Digital Audio Transmission

Section 115 - Compulsory License for Making and Distributing Phonorecords

Section 118 - Compulsory License for the use of Certain Works in Connection with Non-Commercial Broadcasting

Section 119 - Statutory License for Secondary Transmissions for Satellite Carriers

Section 122 - Statutory License for Secondary Transmissions by Satellite Carriers for Local Retransmissions

Section 1003 - Statutory Obligation for Distribution of Digital Audio Recording Devices and Media (Chapter 10).

See www.copyright.gov/licensing/

²⁰ See, e.g., *United States v. Am. Soc'y of Composers, Authors and Publishers*, No. 41-1395, 2001 WL 1589999, (S.D.N.Y. June 11, 2001); and Michael A. Einhorn, *Intellectual Property and Antitrust: Music Performing Rights in Broadcasting*, 24 COLUM.-VLA J.L. & ARTS 349, 361 (2001).

²¹ Sometimes the price is set by a governmental authority without the need to seek a voluntary agreement first.

31. Having thus obtained the authority to license and/or collect fees, the CMO will normally proceed to sign agreements with users that provide for the collection of license fees and usage data. For example, radio stations (broadcasters) provide logs (often in digital form) of the recordings they used to the PROs in an agreed format. While a radio station may use computer logs to report the recordings used, for other types of users (hotels, bars, restaurants), it is difficult to require 100% reporting. Sometimes statistical surveys are used instead. For example, a number of (representative) users may be surveyed for a specific period of time, and the data thus gathered will then be extrapolated to the class of users concerned using statistical regressions and other similar models.

32. The CMO will process such data and apply them to distribute the funds to copyright holders.²² Identification data (metadata) is generally used to match usage data reported by users or generated by the CMO to specific works, recordings or performances and the right holders therein.

(5) Collective management is a major part of copyright in practice

33. As I see it, in practice there are six ways in which copyrights are currently treated in the United States:

- (A) Full individual exercise of rights by the copyright owner
- (B) Voluntary collective management of rights by the copyright owner
- (C) Presumption/designation of uses by statute
- (D) Statutory limitations on damages to the applicable CMO rate
- (E) Statutory or judicial compulsory licensing

²² Payment to foreign copyright holders is often done through local CMOs in each territory on the basis of a contract usually referred to as a Reciprocal Representation Agreement. Worldwide databases of identification data have been created by CISAC and IFRRO. This allows their members to identify foreign works, performances and recordings licensed to them under those reciprocal representation agreements.

(F) Exceptions allowing uncompensated uses (such as fair use)

34. In a full individual exercise scenario (level A), a user must contact the copyright owner to obtain permission to make uses. Examples would be a book author's contract with a publisher or an author allowing the making of a derivative work, such as a film made based upon a novel. This often entails significant transaction costs (negotiation, etc.).

35. Then there are four levels of right at which the author loses the ability to say no to certain uses by others but retains a right to be paid for such uses. Such is the case when an author voluntarily joins a CMO (level B) because CMOs in most cases will not prohibit the use of a work in their repertory.²³

36. At level C, a CMO may be designated by governmental authorities to manage a right. This system is applied in the United States under section 114 (SoundExchange is the designated CMO).

37. Another option (level D) is to statutorily limit the damages available for certain uses. A number of options under consideration for orphan works resemble this option.²⁴

38. The next level is a compulsory license (level E). This may be managed by a private CMO (for example Harry Fox Agency under the section 115 compulsory license). A governmental authority can also be designated for this purpose. The U.S. Copyright Office directly administers royalty fee collections from cable operators for retransmitting television and radio broadcasts (under 17 U.S.C. § 111), from satellite carriers for retransmitting non-network

²³ Often they simply cannot or should not, as would arguably be the case with ASCAP and BMI under their respective consent decrees.

²⁴ See <http://www.copyright.gov/orphan/> (last accessed March 28, 2012). One of the proposals most discussed would limit damages (conditions apply) to a "reasonable compensation" mutually agreed by the owner and the user or, failing that, be decided by a court and the suppression of statutory damages. My point is that if a collective rate was in place, it would likely inform the reasonable compensation determination by a court.

and network signals (17 U.S.C. § 119), and from importers or manufacturers for distributing digital audio recording products ((17 U.S.C. § 1003).²⁵

39. At level F, a statute takes away from the copyright owner the right to receive remuneration for certain uses. Fair use is such a situation.

40. I believe that if Google's uses are not determined to be fair uses, the market, or Congress, will develop a collective licensing system for the types of uses that Google has been making so that Google would not have to negotiate a transactional license for each book or other work it wishes to use. Such an approach would compensate those who created and published the content and whose ability to earn a living often depends on being able to monetize online uses.

(6) Collective management and the digitization of, and mass access to, books

41. Often after a new form of use has emerged, collective management systems are established to license uses that have been found to be desirable but unauthorized. The purpose of collective management is not to put roadblocks in the utilization of works but rather to reconcile the needs of users and authors, to ensure that copyright rights are duly reflected in new forms of use that do not constitute fair uses or are otherwise exempt. Using collective management, users can obtain licenses with limited transaction costs (such as the annual licenses granted by the PROs and by CCC) or at least a single interlocutor. CMOs can also aggregate usage data to protect the privacy of individuals and the confidentiality of institutional and business users.

²⁵ See *Circular 75: The Licensing Division of the Copyright Office*, available at <http://www.copyright.gov/circs/circ75.pdf> (last accessed March 28, 2012).

CONCLUSION

42. Allowing practices like Google's as fair use may be expected to thwart the development of collective management systems for the digital uses of books and book excerpts that authors and publishers would otherwise likely develop, join or license others to develop.

Dated: April 2, 2012

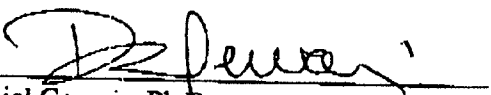

Daniel Gervais, Ph.D.

EXHIBIT A

CURRICULUM VITAE

Daniel J. Gervais

PART I – EMPLOYMENT & HONORS

a) CURRENT POSITION

Professor of Law
Co-Director, Vanderbilt Intellectual Property Program
Vanderbilt University Law School

b) EDUCATION

- Doctorate, University of Nantes (France), 1998
 - *magna cum laude* (“très honorable”)
- Diploma of Advanced International Studies, Geneva (Switzerland), 1989
 - *summa cum laude* (“très bien”)
- LL.M., University of Montreal, 1987
- Computer science studies University of Montreal, 1984-1985
- LL.B. (McGill University/University of Montreal), 1984
- D.E.C. (Science, Jean-de-Brébeuf College, Montreal), 1981

c) PREVIOUS EMPLOYMENT & OTHER ACADEMIC EXPERIENCE

- Acting Dean, Common Law Section, University of Ottawa (Feb-Jul 2006 and Sep-2007-July 2008)
- University Research Chair, Common Law Section, University of Ottawa (2006-2008)
- Vice-Dean, Research, Common Law Section, University of Ottawa (2003-2006)
- Full Professor, Common Law Section, University of Ottawa (2005-2008)
- Associate Professor, Common Law Section, University of Ottawa (2001-2005)
- Vice-President, International, Copyright Clearance Centre, Inc., Massachusetts, USA, 1997-2000
- Consultant, Organization for Economic Cooperation and Development (OECD), Paris, 1997
- Assistant Secretary General, International Confederation of Societies of Authors and Composers (CISAC), Paris, 1995-1996
- Head of Section, World Intellectual Property Organization (WIPO), Geneva, 1992-1995
- Consultant & Legal Officer, General Agreement on Tariffs and Trade (GATT/WTO), Geneva, 1990-1991
- Lawyer, Clark, Woods, (Montreal), 1985-1990.

Visits:

- Visiting Lecturer, Washington College of Law, American University, June 2011;
- Visiting Professor, University of Liège (Belgium), March 2010 and 2011;

- Visiting Professor, University of Strasbourg (Centre for International Intellectual Property Studies (CEIPI), France), Nov.-Dec. 2009;
- Visiting Professor, Université de Montpellier, France (Feb. 2007 and Apr. 2008)
- Visiting Professor, University of Haifa (2005)
- 2004 Trilateral Distinguished Scholar-in-Residence, Michigan State University, Detroit College of Law (April-May 2004)
- Visiting Scholar, Stanford Law School, Feb-Apr. 2004
- Visiting Professor, DEA (graduate) program, Faculty of Law, University of Nantes, France (May 2003)
- Visiting Professor, Faculty of Law, Graduate program in intellectual property (DESS), Centre universitaire d'enseignement et de recherche en propriété intellectuelle (CUERPI), Université Pierre Mendès-France (Grenoble II), France
- Visiting Professor, Faculty of Law, University of Puerto Rico (June-July 2002--instruction in Spanish and English)
- Lecturer, Institute for Information Law, Faculty of Law, University of Amsterdam, Postdoctoral Summer Program in International Copyright Law (every year since 2000; last in July 2011)

d) HONORS

- Ontario Research Excellence Award (ex PREA), 2005*
- Charles B. Seton Award, 2003 (see under "Scholarly Articles" below)
- Quebec Bar 1985. Finished first ex aequo out of 600+ candidates—received all available awards, including:
 - Quebec Bar Award
 - Quebec Young Bar Award
 - Paris Bar Prize
- Two Excellence Awards, Faculty of Law, University of Montreal, 1984

e) OTHER RELEVANT

1. Editor-in-Chief, *Journal of World Intellectual Property*, Wiley-Blackwell (2006-)
2. Panelist, UDRP, WIPO Arbitration and Mediation Center
3. International editor, *Journal of Intellectual Property Law & Practice* (Oxford Univ. Press) (2005-2008)
4. Member, International Association for the Advancement of Teaching and Research in Intellectual Property (ATRIP)
5. Member of the Law Society of Upper Canada (Ontario Bar) and of the Bar of Quebec
6. Languages: English, French, Spanish. German (functional). One year of Mandarin.

* Of the 64 awards in 2005, only one given to a law professor.

f) ACADEMIC CONFERENCES:

- Invited speaker, Copyright in a borderless online environment Symposium, Thoresta, Sweden, October 27-28, 2011
- Invited moderator, Max-Planck Institute Workshop on Economic Partnership Agreements of the EU: A Step Ahead an International IP Law?", Frauenchiemsee, Germany, June 26-28, 2011
- Invited keynote speaker, 39e Colloque Annuel International de l'AFEC, Stretching borders: How far can Canada Go?, Montpellier, France, June 15-17, 2011
- Moderator, Vanderbilt University Law School Program, Beijing, May 21, 2011
- Invited moderator and panelist, 19th Annual Conference on Intellectual Property Law & Policy, Fordham University Law School, New York, April 28-29, 2011
- Invited Chair, Invitation-only Intellectual Property Workshop, Canadian International Council, Ottawa, March 31-April 1, 2011
- Moderator, Patent Unrest, Vanderbilt Law School. February 24, 2011
- Keynote Speaker, Annual Symposium of the Kernochan Center for Law, Media & the Arts, Columbia Law School, New York, January 28, 2011
- Invited speaker, Intellectual Property Institute of Australia (IPRIA), University of Melbourne, Australia, December 13, 2010
- Invited speaker, Trade, Intellectual Property and the Knowledge Assets of Indigenous Peoples: The Developmental Frontier, Victoria University, Wellington, New Zealand, December 8-10, 2010
- Invited speaker, Computer Programs and TRIPS, TRIPS@10 Conference, Columbia University, November 16-18, 2010
- Speaker, International Law Weekend, American Branch of the International Law Association, Fordham Law School, New York, October 22-23, 2010
- Invited speaker, Bits Without Borders conference, Michigan State University, East Lansing, MI, September 25-26, 2010;
- Invited speaker, World Trade Forum, Bern, Switzerland, September 3-4, 2010
- Invited speaker, Copyright @ 300, UC Berkeley School of Law, Berkeley, CA, April 9-10, 2010
- Invited speaker, The Statute of Anne 300 Birthday, Cardozo Law School, New York, March 24-25, 2010
- Invited panelist, Access to Knowledge (A2K) conference, Yale Law School, February 12-13, 2010
- Invited speaker, IUS COMMUNE, Reinventing the Lisbon Agreement, Maastricht University, The Netherlands, November 26, 2009
- Invited speaker, The Lisbon Agreement, CEIPI (Université de Strasbourg, France), November 17, 2009
- Invited keynote speaker, Signifiers in Cyberspace: Domain Names and Online Trademarks

- Conference, Case Western Reserve University, Cleveland, Ohio, November 12, 2009
- Invited speaker, Beyond TRIPS: The Current Push for Greater International Enforcement of Intellectual Property, American University (Washington College of Law), November 5, 2009
- Invited speaker, Intellectual Property Developments in China: Global Challenge, Local Voices conference, Drake University, Des Moines, Iowa, October 15-16, 2009
- Invited speaker, University of Hong Kong, June 12-13, 2009
- Invited speaker, Conference on 100th Anniversary of the 1909 Copyright Act, Santa Clara University, April 27, 2009
- Invited panelist, Fordham International Intellectual Property law & Policy Conference, Cambridge, England, April 15-16, 2009
- Invited participant, University of Cambridge-University of Queensland Copyright History Roundtable, Cambridge, England, April 15, 2009
- Commentator, Vanderbilt Roundtable on User-Generated Content, Social Networking & Virtual Worlds, Nashville, November 14, 2008
- Distinguished Finnegan Lecturer, Washington College of Law, Washington, D.C., October 18, 2008
- Invited panelist, International Law Weekend, New York, October 16, 2008
- Invited speaker, IP Speaker Series, Cardozo Law School, September 22, 2008
- Invited lecturer, Intellectual Property Research Institute of Australia (IPRIA), Melbourne, June 3, 2008
- Invited speaker, International Conference on Patent Law, University of New Zealand, Wellington, May 29-30, 2008
- Invited speaker, Law School of National Taiwan University, March 21, 2008
- Invited commentator, EDGE Project Conference on Intellectual Property and Development, Hong Kong, March 17-18, 2008
- Invited speaker, Cardozo Law School Conference on Harmonizing Exceptions and Limitations to Copyright Law, New York, March 30-31, 2008
- Invited panelist, Fordham Conference on International Intellectual Property Law & Policy, New York, March 27-28, 2008
- *Rapporteur*, International Literary and Artistic Association Biennial Congress (ALAI), Punta del Este, Uruguay, Oct. 31 – Nov. 3 2007
- Invited speaker, Vanderbilt University, Nashville, Tennessee, Oct. 16-17, 2007. “Collective Management of Copyright in North America”, (conference organized in cooperation with WIPO)
- Invited speaker, University of South Carolina, Columbia, SC, October 12, 2007 “The Future of Copyright Law”
- Invited panellist, Fordham University Conference on International Intellectual Property Law & Policy, New York, April 12-13, 2007
- Invited speaker, Dean’s lectures on intellectual property, George Washington University School of Law, Washington D.C., March 13, 2007
- Invited Speaker, UCLA Conference on the WIPO Development Agenda, Los Angeles, March 9-11, 2007
- Invited speaker, International Conference on Impact of TRIPS: Indo-US Experience. NALSAR University of Law, Hyderabad (India), Dec. 15-16, 2006
- Invited speaker, International intellectual property conference, University of Chicago-Kent, October 12-13, 2006
- Speaker, Study days of the International Literary and Artistic Association, Barcelona, June 18-21, 2006

- Invited moderator, Fourteenth Annual Conference on International Intellectual Property Law & Policy, New York, April 20-21 2006
- Invited speaker, University of Michigan, Ann Arbor. Intellectual Property & Development, April 14 2006;
- Invited speaker, Michigan State University College of Law (MSU), East Lansing, The International Intellectual Property Regime Complex, April 7-8 2006
- Invited Roundtable participant, Vanderbilt University Law School, Nashville, Tennessee. Private International Law and Intellectual Property Law: Theory and Practice, March 24-25, 2006
- Invited panelist, Federalist Society, Annual Lawyers Convention. Washington, D.C., November 2005
- Panel Chair, Annual meeting of the International Association for the Advancement of Teaching and Research in Intellectual Property (ATRIP), Montréal, July 11-13, 2005
- Invited lecturer, Institute of European Studies, Macau (IEEM), Advanced IP course (25 June-1 July 2005)
- Invited lecturer, Advanced IP conference, Macau, June 27-30, 2005
- Invited speaker, Conference on the Relationship between international and domestic law McGill University, June 15-16, 2005
- Invited speaker, Conference on the Collective Management of Copyright, Oslo, May 19-21, 2005
- Invited keynote speaker, Conference of the Department of Justice on intellectual property and Internet Law, Ottawa, April 21, 2005
- Invited keynote speaker, LSUC Annual Communications Law Conference, Toronto, April 8-9, 2005
- Invited speaker, Law & the Information Society Conference, Fordham University, New York, April 6-7, 2005
- Invited panelist, Fordham International Intellectual Property Law & Policy Conference, New York, March 31-April 1, 2005
- Invited Speaker, Shanghai 2004: Intellectual Property Rights and WTO Compliance. University of East China, Shanghai, China, Nov. 24, 2004
- Invited speaker, "The Internet: A Global Conversation" Conference, University of Ottawa, Oct. 1-2, 2004
- Invited lecturer, Office for Harmonization in the Internal Market (Trade Marks and Designs). Alicante (Spain), July 2004
- Organizer and speaker, Rethinking Copyright Conference, University of Ottawa, May 20-21, 2004
- Invited panelist, American Intellectual Property Lawyers Association (AIPLA), Dallas TX, May 13-14, 2004
- Invited speaker, 2004 Computers Freedom & Privacy Conference, Berkeley, California Apr. 20-23, 2004
- Invited speaker, Intellectual Property, Sustainable Development & Endangered Species Conference. Detroit College of Law, Michigan State University, March 26-27, 2004
- Invited Speaker, Securing Privacy in the Internet Age Symposium, Stanford Law School, March 13-14, 2004
- Invited keynote speaker, "US Copyright Office Comes to California" Conference, Hastings College of Law, San Francisco, CA, March 3, 2004
- Invited speaker, Global Arbitration Forum, Geneva, Switzerland, Dec. 4-5, 2003;

- Invited Panel Chair and speaker, "Copyright and the Music Industry: Digital Dilemmas", Institute for Information Law, Amsterdam, July 4-5, 2003. Topic: "Collective Rights Management & the Future of Copyright";
- Conference Fellow, "International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime" Conference, Duke Law School, Raleigh, NC, USA, Apr. 4-6, 2003
- Invited speaker, Roundtable on questions arising out of the intersections of technology and questions of social justice, University of Ottawa, March 28, 2003. Topic: "Democracy, Technology and Social Justice" (available at commonlaw.uottawa.ca);
- Invited speaker, Conference of Copyright Law Association of Japan (CLAJ), Tokyo, Dec. 7, 2002. Topic : "Transactional Copyright: Licensing Tailored Uses"
- Invited speaker, Facultés universitaires de Saint-Louis, Belgique, May 25-26 2002. Topic : «De l'œuvre à l'auteur »
- Invited speaker. Institutions administratives du droit d'auteur, colloquium organized by the Université de Montréal, Montreal, Oct. 2001. Topic : « La gestion collective au Canada : fragmentation des droits ou gestion fragmentaire »
- Invited speaker, Annual Meeting of the International Literary and Artistic Association (ALAI International), Columbia University, New York, 2001. Topic: " Rights Management Systems"
- Invited lecturer, Swedish School of Economics and the Finnish IPR Institute, Helsinki, Finland, 2000. Topic: "Copyright and Electronic Commerce", lecture presented to graduate students
- Invited speaker, Fordham University Conference on International Intellectual Property, New York, April 2001. Topic "Electronic Commerce and Copyright"
- Invited speaker, Fordham University Conference on International Intellectual Property, New York, April 2000. Topic: "The TRIPS Agreement After Seattle"
- Invited speaker, Ohio State University, Columbus, Ohio, 2000. Topic: "Digital Licensing of Copyright"
- Invited speaker, Fordham University Conference on International Intellectual Property, New York, April 1999. Topic: "Digital Distance Education: Exemption or Licensing?"
- Invited speaker, Fordham University Conference on International Intellectual Property, New York, April 1999. Topic: "An Overview of TRIPS: Historical and Current Issues"

g) PUBLIC LECTURES:

- Invited speaker and session leader, High-level (Ministerial) Forum on Intellectual Property for the Least-Developed Countries, WIPO, Geneva, July 24-25, 2009
- Invited moderator, Copyright Counseling, Management, and Litigation Law Seminar, Seattle, WA, April 26-27, 2009
- Invited speaker, Annual Meeting. Commission on Intellectual Property, International Chamber of Commerce, Cambridge, England, April 17, 2009
- Invited keynote speaker, Asian Copyright Seminar, Tokyo, Japan, February 25-27, 2009
- Invited speaker, International Copyright Institute, Washington DC, Nov. 28, 2006
- Invited speaker, International Trademark Association, Trademarks Administrators Conference, Crystal City, Virginia, September 19-20, 2006
- Invited speaker, General Assembly of the National Association of Publishers (ANEL), Montréal, September 14, 2006

- Invited speaker, Federalist Society Annual Lawyers Convention, Washington D.C. November 2005.
- Invited keynote speaker. InSIGHT, Old Mill Inn, Toronto, September 2005. Topic: "Copyright Reform in Canada"
- Invited speaker. Canadian Institute, , Montréal, 5-6 June, 2005;
- Invited speaker, Canadian Bar Association, Montreal, Nov. 9, 2004. Topic: "Recent developments in Canadian copyright law"
- Invited speaker, Peer-to-Peer Luncheon speech, The 45th Circuit, Ottawa Centre for Research and Innovation (OCRI), Oct. 5, 2004. Topic: "Peer-to-Peer File-Sharing"
- Invited speaker, Luncheon conference, ALAI Canada, Toronto, Sept. 13, 2004. Topic: "The Supreme Court decision in *SOCAN v. Can. Ass'n of Internet Providers*"
- Invited Lecturer, International Copyright Institute, Washington, D.C., May 5, 2004. Topic: "Collective management of copyright"
- Invited speaker, Biannual Canadian Bar Association/Law Society of Upper Canada Communications Law Conference, Ottawa, April 23-24, 2004. Topic: "The Supreme Court decision in *CCH v. Law Society of Upper Canada*"
- Invited Speaker, Association pour l'avancement des sciences et des techniques de la documentation (ASTED), Annual Meeting, Gatineau, Quebec, Nov. 7, 2003. Topic : "Copyright Exceptions and Librarians"
- Invited Keynote Speaker, International Conference on National Copyright Administrative Institutions, Ottawa, Oct. 8-10, 2003. Topic: "Status Report on Internet Tariffs";
- Invited Panelist, Intellectual Property Institute of Canada (IPIC), Annual Meeting, Halifax, Sept. 19, 2003. Topic: "Technical Protection Measures and Copyright";
- Invited Speaker, North American Workshop on Intellectual Property and Traditional Knowledge, Ottawa, Sept. 7-9, 2003. Topic: Traditional Knowledge and Intellectual Property: The Issues (overview);
- Invited speaker, Association des juristes d'expression française de l'Ontario (AJEFO), Ottawa, June 21, 2003. Topic: Law & Technology
- Invited speaker, Editors Association of Canada, Ottawa, June 15, 2003. Topic : "A Walk Through the Copyright Labyrinth";
- Keynote speaker, Computer Assisted Language Instruction Consortium (CALICO), Ottawa, May 22, 2003. Topic : "Copyright, Copyleft, Copywrong?";
- Invited speaker, Expert Roundtable on Transactions in Intellectual Property, Amsterdam, May 17-18, 2003. Topic: "Fragmentation of Copyright and Rights Management";
- Invited speaker, "The 45th Circuit" (OCRI), Ottawa, Apr. 1, 2003. Topic : "Emerging Issues in Digital Rights Management";
- Invited speaker, Information Highways Conference, Toronto, March 24, 2003. Topic : Digital Rights Management : Balancing Creators Rights and User Interests";
- Invited speaker, Literary and Artistic Association (ALAI Canada), Montreal, Oct. 22, 2002. Topic : « La gestion collective es-elle en crise? »;
- Invited instructor, World Trade Organization (WTO), Nairobi, Sept. 2002. Topic: The TRIPS Agreement after Doha";
- Invited instructor, World Trade Organization (WTO), Casablanca, Sept. 2002. Topic: "The TRIPS Agreement After Doha";
- Invited speaker, Literary and Artistic Association (ALAI Canada), Montreal, May 7, 2002. Topic: « La décision de la Cour suprême dans l'affaire *Galeries d'art du Petit Champlain Inc. c. Théberge* »;

- Invited instructor. International Copyright Institute (Washington, D.C.), Nov. 2000 and Nov. 2001. Topic: “Collective Management of Copyright in the Digital Age”;
- Invited speaker. Annual Meeting of the International Trademark Association (INTA), Denver, CO, USA, May 2000. Topic: “The TRIPS Agreement: Implementation and Dispute Settlement Issues”;
- Invited speaker, New York Bar (NYCLA), 2000. Topic : “Current Rights Clearance Issues”;
- Invited speaker, Society of Scholarly and Professional Publishers (SSP), Boston, Mass., 1999. Topic: “Copyright Licensing Issues” ;
- Invited speaker, Canadian Writers Union Conference, Toronto, 2000. Topic: “Copyright Management in the Digital Age”;
- Invited Speaker, Heritage Canada Roundtable on Copyright Management, Ottawa, 1999. Topic: “Copyright Management: US Practices”;
- Invited speaker, International Publishers Association (IPA) Congress, Tokyo, Japan, 1998. Topic: “Copyright, Publishing in the Face of Technological Change”;
- Invited speaker, Marché international du multimédia (MILIA), Cannes, France, 1995. Topic : “Droit d’auteur et multimédia”;
- Invited speaker, Chilean Book Fair, Santiago, Chile, 1999. Topic: “El papel de las sociedades de derechos reprográficos y de la IFRRO”;
- Invited speaker, Sydney Bar, NSW, Australia, 1996. Topic: “Intellectual Property and Technology”
- Invited speaker, Congress of the International Publishers Association, Barcelona, Spain, 1996. Topic: “Online Copyright Licensing”;
- Invited speaker, Pan African Film Festival (FESPACO), Ouagadougou, Burkina Faso, 1994. Topic: “Protection of Intellectual Property in Film” ;
- Invited speaker, Chambre française du commerce et de l’exportation (CFCE), Paris, 1990. Topic : “TRIPS: Le point à dix semaines de Bruxelles”;

h) Publications[†]

i) Summary

Books authored	8
Books edited	3
Book chapters	23+7
Articles	50+2
Conference proceedings (refereed)	1
Major reports	15
Other publications	26
Commissioned Reports	6

ii) Detailed description

Books (authored)

1. INTELLECTUAL PROPERTY: THE LAW IN CANADA, 2^d ed. (Carswell, 2011) --with Prof. Elizabeth Judge, 1223 p.

[†] **Only ACCEPTED publications are indicated as forthcoming.**

2. L'ACCORD SUR LES ADPIC: PROPRIÉTÉ INTELLECTUELLE À L'OMC (Larcier, 2010), 733 p.
3. THE TRIPS AGREEMENT: DRAFTING HISTORY AND ANALYSIS, 3rd ed. (Sweet & Maxwell, December 2008), 785 p.
4. LE DROIT DE LA PROPRIÉTÉ INTELLECTUELLE, (Yvon Blais, 2006). 702 pages--with Professors Elizabeth Judge and Mistrale Goudreau
5. INTELLECTUAL PROPERTY: THE LAW IN CANADA (Carswell, 2005), with Prof. Elizabeth Judge
6. THE TRIPS AGREEMENT: DRAFTING HISTORY AND ANALYSIS, 2ND ed. (Sweet & Maxwell, June 2003). 590 p.
7. THE TRIPS AGREEMENT: DRAFTING HISTORY AND ANALYSIS. (Sweet & Maxwell, 1998). 444 p.
8. LA NOTION D'ŒUVRE DANS LA CONVENTION DE BERNE ET EN DROIT COMPARÉ. (Librairie Droz, 1998). 276 p.

Books (edited)

1. COLLECTIVE MANAGEMENT OF COPYRIGHT AND RELATED RIGHTS, 2nd ed. (Kluwer Law International, 2010) 495 p.
2. INTELLECTUAL PROPERTY, TRADE AND DEVELOPMENT (Oxford Univ. Press, 2007). 564 p.
3. COLLECTIVE MANAGEMENT OF COPYRIGHT AND RELATED RIGHTS (Kluwer Law International, 2006), 464 p.

Book Chapters[‡]

1. *Traditional Innovation and the Ongoing Debate on the Protection of Geographical Indications*, INTELLECTUAL PROPERTY AND INDIGENOUS INNOVATION (P Drahos and S Frankel, eds) (forthcoming)
2. *The International Legal Framework of Border Measures in the Fight against Counterfeiting and Piracy*, ENFORCEMENT OF INTELLECTUAL PROPERTY RIGHTS THROUGH BORDER MEASURES, 2D ED. (O. Vriens and M. Schneider eds.). Oxford Univ. Press, 2011 (forthcoming)
3. *Adjusting Patentability Criteria to Optimize Innovation: A Look at China and India*, GLOBAL PERSPECTIVES ON PATENT LAW (M Bagley and R Okediji, eds). Oxford Univ. Press, x (forthcoming)
4. *The TRIPS Agreement and Climate Change*, in RESEARCH HANDBOOK ON INTELLECTUAL PROPERTY AND CLIMATE CHANGE (Joshua Sarnoff, ed.) (forthcoming)
5. *Copyright, Culture and the Cloud*, in BITS WITHOUT BORDERS (Sean Pager & Adam Candeub, eds.) (forthcoming)
6. *Country Clubs, Empiricism, Blogs and Innovation: The Future of International Intellectual Property Norm-Making in the Wake of ACTA*, TRADE GOVERNANCE IN THE DIGITAL AGE, Mira Burri and Thomas Cottier (eds). Cambridge University Press, 2011 (forthcoming)

[‡] R= refereed publication.

7. **R** *The TRIPS Agreement*, MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW; (forthcoming, 2011)
8. *TRIPS Articles 10; 63-71*, in CONCISE INTERNATIONAL AND EUROPEAN IP LAW, 2D ED. (Th. Cottier and P. Véron, eds). Kluwer Law International, 2011, pp. 38-42 and 168-186
9. *User-Generated Content and Music File-Sharing: A Look at Some of the More Interesting Aspects of Bill C-32*, in FROM "RADICAL EXTREMISM" TO "BALANCED COPYRIGHT": CANADIAN COPYRIGHT AND THE DIGITAL AGENDA (M. Geist, ed.)
10. *Of Silos and Constellations: Comparing Notions of Originality in Copyright Law*, in INTELLECTUAL PROPERTY PROTECTION OF FACT-BASED WORKS (Robert F. Brauneis, ed) (Edward Elgar, 2010) 74-106--with Professor Elizabeth Judge;
 - Also published as an article (see below)
11. *Policy Calibration and Innovation Displacement*, in DEVELOPING COUNTRIES IN THE WTO LEGAL SYSTEM (J. Trachtman, and Ch. Thomas, eds.) (Oxford Univ. Pr., 2009) 363-394;
12. *TRIPS 3.0*, in THE DEVELOPMENT AGENDA : GLOBAL INTELLECTUAL PROPERTY AND DEVELOPING COUNTRIES (N. Netanel, ed) 51-75. (Oxford Univ. Pr., 2009)
13. **R** *A Uniquely Canadian Institution: The Copyright Board of Canada*, in A NEW INTELLECTUAL PROPERTY PARADIGM: THE CANADIAN EXPERIENCE (Y. Gendreau ed). (Edward Elgar, 2009)
14. *TRIPS Article 10; Articles 63-71*, in CONCISE INTERNATIONAL AND EUROPEAN IP LAW (Th. Cottier and P. Véron, eds). (Kluwer Law International, 2008), 39-42 et 153-170
15. *Intellectual Property and Human Rights: Learning to Live Together*, in INTELLECTUAL PROPERTY AND HUMAN RIGHTS (P. Torremans, ed). (Wolters Kluwer, 2008) 3-24
16. **R** *A Canadian Copyright Narrative*, in COPYRIGHT LAW: A HANDBOOK OF CONTEMPORARY RESEARCH. (P. Torremans, ed.) (Edward Elgar, 2007) 49-82;
17. *The Changing Landscape of International Intellectual Property*, in, INTELLECTUAL PROPERTY AND FREE TRADE AGREEMENTS. (Christopher Heath and Ansel Kamperman Sanders, eds) (Oxford: Hart Publishing, 2007), 49-86;
18. *TRIPS and Development*, in INTELLECTUAL PROPERTY, TRADE AND DEVELOPMENT (D. Gervais, ed--see under Books (edited) above), 3-60
19. *A TRIPS Implementation Toolbox*, in *idem*, 527-545
20. *Traditional Knowledge and Intellectual Property; A TRIPS Compatible Approach*, in, IPR PROTECTION AND TRIPS COMPLIANCE. (Veena, ed.) (Amicus/ICFAI University Press, 2007), 146-178;
 - Republication of article listed under No. 24 below
21. *Em busca de uma Norma Internacional para os Direito de Autor: O 'Teste dos Três Passos Reversos'*, in PROPIEDADE INTELECTUAL (Edson Beas Rodrigues Jr et Fabrício Polido, eds), (Rio de Janeiro, Elsevier, 2007), 201-232 (republication of article listed under No 22 in list below)
22. *The TRIPS Agreement and the Changing Landscape of International intellectual Property*, in INTELLECTUAL PROPERTY AND TRIPS COMPLIANCE IN CHINA. (Paul Torremans et al., eds). (Edward Elgar, 2007), 65-84
23. *The TRIPS Agreement and the Doha Round: History and Impact on Development*, in

INTELLECTUAL PROPERTY AND INFORMATION WEALTH. (Peter Yu, ed), (Praeger, 2006), vol. 3, 23-72.

24. *The Changing Role of Copyright Collectives*, in COLLECTIVE MANAGEMENT OF COPYRIGHT AND RELATED RIGHTS. (Daniel Gervais, ed.) (Kluwer Law International, 2006), 3-36
25. **R** *The Role of International Treaties in the Interpretation of Canadian Intellectual Property Statutes*, in THE GLOBALIZED RULE OF LAW: RELATIONSHIPS BETWEEN INTERNATIONAL AND DOMESTIC LAW. (O. FITZGERALD, ED), (Toronto: Irwin Law, 2006), 549-572
26. **R** *Le rôle des traits internationaux dans l'interprétation des lois canadiennes sur la propriété intellectuelle*, in O. Fitzgerald (ed), RÈGLE DE DROIT ET MONDIALISATION : RAPPORTS ENTRE LE DROIT INTERNATIONAL ET LE DROIT INTERNE (Yvon Blais, 2006), 679-712;
 - French version of previous item in list
27. **R** *The TRIPS Enforcement Provisions*, in, CONCISE COMMENTARY OF EUROPEAN INTELLECTUAL PROPERTY LAW (Thomas Dreier, Charles Gielen, Richard Hacon, eds.) (Kluwer Law International, 2006)
28. *The TRIPS Agreement*, in BORDER MEASURES IN THE EUROPEAN UNION. (OLIVIER VRINS AND MARIUS SCHNEIDER, EDS.), (Oxford University Press, 2006), 37-62;
29. **R** *Use of Copyright Content on the Internet: Considerations on Excludability and Collective Licensing*, in IN THE PUBLIC INTEREST: THE FUTURE OF COPYRIGHT LAW IN CANADA (Michael Geist, ed). (Toronto: Irwin Law, Oct. 2005);
30. *Copyright and eCommerce: License or Lock-up?*, in INTELLECTUAL PROPERTY IN THE GLOBAL MARKETPLACE : 2001 UPDATE. (Neil Wilkof et al. eds.), (New York: John Wiley & Sons, 2002). 18 p.

Articles in English[§]

1. *The Landscape of Collective Management*, COLUM-VLA J. L & ARTS (2011) (forthcoming)
2. *Cloud Control: Copyright, Global Memes and Privacy*, J. TELECOM. & HIGH TECH L. (2011) (coauthored with Dan Hyndman) (forthcoming)
3. *Making Copyright Whole: A Principled Approach to Copyright Exceptions and Limitations*, 5:1/2 UNIV. OTTAWA L. & TECH. J. 1-41 (2008)*
 - Published in March 2011
4. *The Google Book Settlement and the TRIPS Agreement*, 2011 STAN. TECH. L.R. 1-11;
5. *Fair Use, Fair Dealing, Fair Principles: Efforts to Conceptualize Exceptions and Limitations to Copyright*, 57:3 J. COPYRIGHT. SOC.Y OF THE USA 499-520 (2010);
 - **Reprinted in INTELLECTUAL PROPERTY LAW REVIEW (2011) as one of best intellectual property articles of 2010**
6. *Reinventing Lisbon: The Case for a Protocol to the Lisbon Agreement*, 11:1 CHICAGO J. INT'L L.67-126 (2010);

[§] Only accepted publications indicated as forthcoming. Book reviews are listed separately.

7. *The Regulation of Inchoate Technologies*, 47 HOUSTON L. REV. 665 (2010);
8. *The 1909 Copyright Act in Historical Context*, 26:2 SANTA CLARA HIGH TECH L.J.185-214 (2010);
9. *L'Arrangement de Lisbonne, un véhicule pour l'internationalisation du droit des indications géographiques ?* 35 PROPRIÉTÉS INTELLECTUELLES 691 (2010) (coauthored with Prof. Christophe Geiger, Norbert Olszak and Vincent Ruzek
10. *Towards a Flexible International Framework for the Protection of Geographical Indications*, 1:2 WIPO JOURNAL 147-158 (2010) (coauthored with Prof. Christophe Geiger, Norbert Olszak and Vincent Ruzek)
 - English version of previous title
11. *The Misunderstood Potential of the Lisbon Agreement*, 1:1 WIPO JOURNAL 87-102 (inaugural issue - on invitation) (2010)
12. *Of Silos and Constellations: Comparing Notions of Originality in Copyright Law*, 27:2 CARDOZO ARTS & ENTERTAINMENT L. J. 375-408 (2009)--with Professor Elizabeth Judge;
13. *Traditional Knowledge: Are We Closer to the Answers?*, 15:2 ILSA J. OF INT'L. AND COMP. LAW 551-567 (2009);
14. *The Tangled Web of User-Generated Content*, 11:4 VAND. J. OF TECHNOLOGY AND ENTERTAINMENT LAW 841-870 (2009);
15. *World Trade Organization panel report on China's enforcement of intellectual property rights*, 103:3 AM. J. INT'L L.549-554 (2009) (International Decision--on invitation);
16. *Of Clusters and Assumptions: Innovation as Part of a Full TRIPS Implementation*, 77:5 FORDHAM L. R. 2353-2377 (2009)
17. *R A Canadian Copyright Narrative*, 21 INT. PROP. J. (Can.) 269 (2009)
 - Republication of book chapter with same title
18. *The Protection of Databases*, 82:3 CHI-KENT L. REV. 1101-1169 (2007);
19. *R The Purpose of Copyright Law in Canada*, 2:2 UNIV. OTTAWA. J. L. & TECH. 315-356 (2006);
20. *R The Changing Landscape of International Intellectual Property*, 2 J. OF INTELL. PROP. LAW & PRACTICE 1-8 (2006);
21. *Intellectual Property and Development: The State of Play*, 74 FORDHAM LAW REVIEW 505-535 (2005);
22. *Towards A New Core International Copyright Norm: The Reverse Three-Step Test*, 9 MARQ. INTELL. PROP. L. REV. 1-37 (2005);
23. *Copyright in Canada: An Update After CCH*, REVUE INT. DROIT D'AUTEUR RIDA 2-61(2005);
 - Also published in French (see below)
24. *Traditional Knowledge & Intellectual Property: A TRIPS-Compatible Approach*, [2005] MICH. ST. L. REV. 137-166;
25. *R International Intellectual Property and Development: A Roadmap to Balance?*, 2:4 J. OF GENERIC MEDICINES 327-334 (2005);

26. *The Price of Social Norms: Towards a Liability Regime for File-Sharing*, 12 J. INTELL. PROP. L. 39-74 (2004);
27. **R** *The Compatibility of 'Skill & Labour' with the Berne Convention and the TRIPS Agreement*, [2004] 2 EUR. INT. PROP. REV. 75-80;
28. *Canadian Copyright Law Post CCH*, 18:2 INTELL. PROP. J. (Can.) 131-168 (2004);
29. *Spiritual but Not Intellectual? The Protection of Sacred Intangible Traditional Knowledge*, 11 CARDOZO J. OF INT'L & COMP. LAW 467-495(2003);
30. **R** *TRIPS, Doha & Traditional Knowledge: A Proposal*, 6 J. WORLD INT. PROP. 403-419 (2003);
31. **R** *Fragmented Copyright, Fragmented Management: Proposals to Defrag Copyright Management*, 2 CAN. J. OF L. & TECH 15-34 (2003) (with Prof. Alana Maurushat)
32. **R** *Feist Goes Global: A Comparative Analysis of the Notion of Originality in Copyright Law*, 49:4 J. COPYRIGHT. SOC.Y OF THE USA 949-981(2002);*
 - Winner, **Charles Best Seton Award**, Best Article of 2002-3, Copyright Society of the USA
 - Article cited by the Chief Justice of Canada in *CCH Canadian Inc. v. Law Society of Upper Canada*, [2004] 1 S.C.R. 339 (Can.), at para. 18.
33. *The Internationalization of Intellectual Property: New Challenges from the Very Old and the Very New*, 12:4: FORDHAM INTELL. PROP., MEDIA & ENTERTAINMENT L. J. 929-990 (2002);
34. **R** *Collective Management of Copyright and Neighboring Rights in Canada: An International Perspective*, 1 CAN. J. OF LAW & TECH. 21-50 (2002);
35. *Transmission of Music on the Internet: A Comparative Study of the Laws of Canada, France, Japan, the U.K. and the United States*, 34:3 VANDERBILT J. OF TRANSNAT'L L. 1363-1416 (2001);
 - Article cited in the majority opinion of the Supreme Court of Canada in *Society of Composers, Authors and Music Publishers of Canada v. Canadian Association of Internet Providers*, 2004 SCC 45 (Can.), at para. 75.
36. **R** *The TRIPS Agreement After Seattle: Implementation and Dispute Settlement Issues* 3 J. OF WORLD INT. PROP. 509-523(2000);
37. **R** *Electronic Rights Management Systems*, 3 J. OF WORLD INT. PROP. 77-95 (2000);
38. **R** *The TRIPS Agreement: Interpretation and Implementation*, 3 EUR. INT. PROP. REV., 156-162 (1999);
39. **R** *Intellectual Property in the MAI: Lessons to Be Learned*, 2 J. WORLD INT. PROP. 257-274 (1999) (with Vera Nicholas)
40. **R** *Electronic Rights Management and Digital Identifier Systems*, J. ELEC. PUBLISHING, online only, March 1999. Available at <http://www.press.umich.edu/jep/04-03>. (18 pages)
41. **R** *The Protection Under International Copyright Law of Works Created with or by Computers*, 5 IIC INTERN'L REV. INDL PROP. AND COPYRIGHT L. 629-660 (1991).

Articles in French and other languages

1. *Trente ans de droit d'auteur à la Cour suprême du Canada*, 21 :2 CAHIERS DE PROPRIÉTÉ INTELLECTUELLE 419-448 (2009)
2. *Propiedad intelectual y derechos humanos: aprendiendo a vivir juntos*, 3:5 REVISTA IBEROAMERICANA DE DERECHO DE AUTOR (2009)
 - o Edited translation of book chapter with same title
3. Roberston c. Thomson Corp. : *Un commentaire sur le droit des pigistes à la lumière de l'intervention de la Cour suprême du Canada*, 3 :2 REVUE DE DROIT & TECHNOLOGIE DE L'UNIVERSITÉ D'OTTAWA/UNIVERSITY OF OTTAWA LAW & TECHNOLOGY JOURNAL, 601-614 (2006);
 - o French version of article mentioned at no 25 in list above.
4. **R** *Le droit d'auteur au Canada après CCH*, 203 REVUE INT. DROIT D'AUTEUR RIDA 2-61(2005);
5. **R** *Essai sur la fragmentation du droit d'auteur : Deuxième partie* 16 CAHIERS DE PROPRIÉTÉ INTELLECTUELLE 501-536 (2004);
6. **R** *Etre au parfum: La protection des marques olfactives en droit canadien*, 15 CAHIERS DE PROPRIÉTÉ INTELLECTUELLE 865-904(2003);
7. **R** *Essai sur la fragmentation du droit d'auteur : Première partie*, 15 CAHIERS DE PROPRIÉTÉ INTELLECTUELLE 501-536 (2003);
8. **R** *L'affaire Théberge*, 15 CAHIERS DE PROPRIÉTÉ INTELLECTUELLE 217-240 (2002);
9. **R** *Los sistemas básicos de derecho de autor y copyright: La noción de obra y la gestión de los derechos de autor*, 26 REVISTA DE DERECHO PRIVADO, 15-27(2001);
10. **R** *La Responsabilité des États à l'égard des actes des organes judiciaires*, 6 R.Q.D.I. 71-82 (1989-1990);
11. **R** *Le Droit de refuser un traitement psychiatrique au Québec*; 26 CAHIERS DE DROIT 807 (1985)

Conference Proceedings (Refereed)

- **R** *Le droit d'auteur au Canada: fragmentation ou gestion fragmentaire*, in INSTITUTIONS ADMINISTRATIVES DU DROIT D'AUTEUR.(Y. Gendreau, ed.). (Cowansville : Éditions Yvon Blais, 2002), 459-477

Other Publications—All languages

1. *The Google Book Settlement and International Intellectual Property Law*, 15:9 ASIL INSIGHT (Apr, 11, 2011)
2. *Foreword*, in IMPLEMENTING THE WIPO DEVELOPMENT AGENDA (Jeremy DeBeer, Ed.). Ottawa: Wilfrid Laurier University Press. 2009. ix-xii;
3. *Collective Management of Copyright and Related Rights in North America*, in ASIAN COPYRIGHT SEMINAR, (Tokyo, Feb. 25, 2009) 17-72;
4. *La Parodie et le moyen de défense fondé sur l'« intérêt du public »*, in DROIT D'AUTEUR ET LIBERTÉ D'EXPRESSION/COPYRIGHT AND FREEDOM OF EXPRESSION, 2006 BARCELONE, (ALAI, 2008);
5. *Litigation, not politics, drives change in IP*, 25:28, THE LAWYERS WEEKLY (November 25, 2005) 2 pages;

6. *TRIPS: A Question of Balance*. IPR INFO (Helsinki: Immateriaalioikeustuutti), 2/2005, 26-27;
7. *The Realignment of Copyright in Canada*. Twelfth National Conference on Communications Law, Toronto, April 7, 2005 (51 pages);
8. *The Changing Face of Copyright*, 7:4 COPYRIGHT & NEW MEDIA LAW NEWSLETTER, 3 pages (2003);
9. *Arbitration Concerning Intellectual property Rights: A Key to the Success of the Doha Round*, 7:2 J. OF WORLD INT. PROP. 245-248 (2004);
10. *The Evolving Role(s) of Copyright Collectives, in DIGITAL RIGHT MANAGEMENT - THE END OF COLLECTING SOCIETIES?* (Christoph Beat Graber, ed.) (Lucerne, 2005);
11. *A Viable Rights Clearance Scheme*, 6:2 COPYRIGHT & NEW MEDIA LAW NEWSLETTER 3 (2002);
12. "Copyright and the Use Paradigm," in *COPYMART: THE PRODUCT AND ITS PROSPECTS: PROCEEDINGS OF THE BERLIN SYMPOSIUM*. (Z. Kitagawa, ed.), (Kyoto: IIAS, 2003), 109-116;
13. "Traditional Knowledge: A Challenge to the International Intellectual Property System," in, 7 *INTERNATIONAL INTELLECTUAL PROPERTY LAW AND POLICY*. (New York: Juris, 2002). ch 76-1;
14. "The TRIPS Agreement: Life After Seattle?," in 6 *INTERNATIONAL INTELLECTUAL PROPERTY LAW AND POLICY*. (New York: Juris, 2001). ch. 40-1;
15. *E-Commerce and Intellectual Property: Lock-it Up or License?*, in 6 *INTERNATIONAL INTELLECTUAL PROPERTY LAW AND POLICY*. (New York: Juris, 2001). ch. 87-1;
16. *Electronic Rights Management Systems*, in *Y2C: COPYRIGHT LAW 2000* (Jon A. Baumgarten and Marybeth Peters, eds),. (New Jersey: Glasser Legal Works: 2000) (15 pages);
17. *An Overview of TRIPS: Historical and Current Issues*, in 5 *INTERNATIONAL INTELLECTUAL PROPERTY LAW AND POLICY*. (New York: Juris, 2000), ch. 40;
18. *Digital Distance Education: Exemption or Licensing?*, in, 4 *INTERNATIONAL INTELLECTUAL PROPERTY LAW AND POLICY*. (New York: Juris, 1999), ch. 87;
19. *Copyright Aspects of Electronic Publishing*, in *PROCEEDINGS OF EP'94*, (Beijing: The Science Press, 1994) 4-12;
20. *ECMS: From Rights Trading to Electronic Publishing*, in *THE PUBLISHER IN THE CHANGING MARKETS. PROCEEDINGS OF IPA FOURTH INTERNATIONAL COPYRIGHT SYMPOSIUM*. (Tokyo: Ohmsha, 1998). 194-212 (18 pages);
21. *The TRIPS Agreement: Enforcement and Dispute-Settlement Provisions*, in *THE PUBLISHER IN THE CHANGING MARKETS. PROCEEDINGS OF IPA FOURTH INTERNATIONAL COPYRIGHT SYMPOSIUM* (Tokyo : Ohmsha, 1998). 230-236 (7 pages);
22. « L'état des lieux: la gestion collective dans le monde, en Europe et en France ». (Paris: SACEM, 1996). (11 pages);
23. « Gestion des droits », in *ACTES DU COLLOQUE LES AUTOROUTES DE L'INFORMATION : ENJEUX ET DÉFIS* », HUITIÈMES ENTRETIENS DU CENTRE JACQUES CARTIER RHÔNE-ALPES. (Lyons: Université de Lyon-2, 1996);
24. « Les 'œuvres multimédia' : le point de vue de l'OMPI », in *LE MULTIMÉDIA : MARCHÉ, DROIT ET PRATIQUES JURIDIQUES. ACTES DU JURISCOPE 94*. (Paris : P.U.F., 1995). (8 pages);

25. « Identificación de las obras utilizadas en sistemas digitales », in NUM NOVO MUNDO DO DIREITO DE AUTOR. (Lisbon: COSMOS/Arco-Iris, 1994). (17 pages);
26. “El principio del trato nacional en los acuerdos internacionales de propiedad intelectual”, same book— (15 pages);

Book Reviews

- *T. Scassa and M. Deturbide. Electronic Commerce Law In Canada* (Toronto: CCH, 2004). Reviewed at 42 CAN. BUS. L. J. 292-310 (2005);
- *Le Droit du Commerce Électronique. (V. Gautrais, ed.).* (Montréal, Thémis, 2002. 709 pp.), reviewed at 33 REVUE GÉNÉRALE DE DROIT 489-505 (2003)

Technical Reports, Law Reform, and Commissioned Research Work

1. *Fair Dealing, the Three Step test and Exceptions in the Canadian Copyright Act*, Report commissioned by Industry Canada, November 2007
2. *Application of an Extended Licensing Regime in Canada: Principles and Issues Related to Implementation*. Department of Canadian Heritage, July 2003*
3. *Collective Management of Copyright and Neighboring Rights in Canada: An International Perspective*. Department of Canadian Heritage, August 2001*
4. *Intellectual Property Practices in the Field of Biotechnology*. Report published by the Trade Directorate, Organization for Economic Co-operation and Development (OECD), Paris 1999. Document No. TD/TC/WP(98)15/FINAL.(23 pages);
5. THE LAW AND PRACTICE OF DIGITAL ENCRYPTION. (Amsterdam: University of Amsterdam, 1998). (64 pages)
6. *ECMS: The Policy Issues*, in IMPRIMATUR CONSENSUS FORUM. 21/22 NOVEMBER 1996. (London: Imprimatur, 1996).

EXHIBIT B

Exhibit B to Gervais Report

1. The Fourth Amended Class Action Complaint
2. Google Objections and Responses to Plaintiffs' First Requests for Admissions
3. Plaintiffs' Brief in Support of Their Motion for Class Certification
4. Zack Decl. and Exhibits in support of motion for class certification
5. Google's Brief in Opposition to Class Certification
6. Clancy Decl., Gratz Decl., Perle Decl., Poret Decl. and Report, filed with Google class certification opposition
7. Google's brief and reply brief in support of its motion to dismiss the Authors Guild
8. Plaintiffs' brief in opposition to Google's motion to dismiss the Authors Guild
9. The materials cited in my report
10. The article available at <http://papers.ssrn.com/sol3/papers.cfm> and materials cited therein
11. The books.google.com website
12. The Complaint, Answer and Plaintiffs' brief in support of motion for partial judgment on the pleadings in *Authors Guild, et al. v. Hathitrust, et al.*, 11 Civ. 6351 (HB)(S.D.N.Y.)